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THE
ADVENTURE OF YOUTH

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THE PSYCHOLOGY OF ADOLESCENCE AND ITS
BEARING ON THE EXTENSION AND REFORM
OF ADOLESCENT EDUCATION

By

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PREFACE

THIS book surveys the educational problems that will need to be faced by those who are directly concerned in the task of extending and reorganizing adolescent education—administrators, members of Local Education Authorities, training college lecturers and, particularly, the students and teachers who will be called to service in the various kinds of schools and colleges for adolescents now beginning to be differentiated. In recent years many Local Education Authorities have made important experiments in junior technical, senior and day continuation schools, and the Butler Education Act now provides them with a unique opportunity, not only for an extension but also for a thorough-going reform of adolescent education. The chief responsibility for making the present opportunity the occasion for a real improvement in the quality of education must necessarily rest with the teaching profession ; and the main objective of this book will have been reached if it should prove to be of practical help in the solution of those internal problems of reorganization that must necessarily accompany the outward administrative changes. It is, however, obvious that this reform of adolescent education, involving as it does a new integration of the needs of youth and of the needs of society, cannot be effected without the intelligent support of the whole community. It is hoped, therefore, that this book may be of interest to those members of a wider public who are willing and anxious to respond to the present challenge of youth.

In particular, its review of the known scientific facts concerning this critical transition period between childhood and maturity should meet the needs of parents and voluntary workers, such as Sunday-school teachers and

youth leaders, who are concerned for the well-being of adolescents and who are recognizing the necessity for a more exact understanding of the difficulties and developments characteristic of the period of youth.

The present widespread determination among many sections of the community to do justice to the needs of youth has created a demand for a further edition of my earlier book on *Youth*. While some material found in that work has been retained, so many changes and substantial additions were demanded to meet present-day requirements that it has been necessary for the book to be entirely reset, and in many respects, therefore, it may be considered a new volume.

It is with pleasure that I acknowledge the help I have received in this work from many teachers and youth leaders who have discussed their problems with me ; and from students of the University of Manchester and of Cardiff University College, who have co-operated wholeheartedly in answering the questionnaire concerning adolescence to which references are made in this book. My thanks are also due to *The Times* for permission to reprint parts of my articles on " Remodelling Adolescent Education " and " The Secondary School Curriculum " contributed to the *Educational Supplement* in October 1943 and February 1944 respectively ; to the University of London Press ; and to Miss E. M. D. Morris, M.A., and Miss Ann Vaughan for valuable aid in proof-correcting and in the making of the index.

O. A. W.

CARDIFF, 1944.

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CHAPTER I

INTRODUCTORY: THE PRESENT POSITION

THE full significance of the present drive for the expansion and reform of *adolescent* education in this country can only be appreciated when it is viewed against the background of the industrial, political and social movements which occurred in the period of the two Great World Wars. The 1914-18 War, like most others, was followed by a period of intense depression and discontent. Among our own people the dissatisfaction with existing social and industrial conditions, which was widespread even before the catastrophe, was deepened by the experience of war. Many workers who before 1914 had chafed in an industrial system which cramped and confined their real natures, and who in common war-service had realized possibilities of co-operation with members of other social groups hitherto undreamed of, came back expecting a new era and a better order of society. But they found instead the same cramping conditions, or worse—ill-health or unemployment—the old difficulties being merely accentuated by trade depression and accumulated war-debts.

Progressive movements for improving social and industrial conditions, therefore, naturally gathered strength, and fair-minded men of all political parties realized that the war made it impossible for the old order to remain unchanged. Consequently, schemes and counter-schemes for the improvement of social conditions were debated on all sides; and these, whatever may have been their respective merits or demerits, were at least indicative of a desire for change, a willingness to experiment—in short, a creative movement in human

affairs. Some modifications in political and international organizations were enacted which were at least a partial expression of this movement. The extension of the franchise to women on the same terms as men by the passing of the Equal Franchise Act (1928), a change which was largely the outcome of the War, completed the skeleton of a political democracy in our own country. The great experiment of the League of Nations, though unsuccessful, was nevertheless an outstanding expression of the new élan towards more harmonious co-operation between nations and towards the eventual outlawry of war.

The demand for the extension of provision for adolescent education which followed the first World War was closely related to these conditions and movements. Most men returning from service in the 1914-18 War, although they hardly expected an El Dorado for themselves as a result of their sacrifices, looked forward hopefully to a better world for their children. Many were determined that their children should not only work under improved conditions, but should also have chances of development which they themselves had missed. Accordingly, the Fisher Act of 1918, which provided for part-time compulsory continued education from 14 to 18 for all boys and girls not proceeding to secondary schools, was at first received with enthusiasm, though it is only fair to add that there were many educational experts who favoured the alternative and more democratic solution of full-time *secondary education for all*. Later, serious difficulties arose in implementing the provisions of the Fisher Act, largely because some employers objected, perhaps legitimately, to the dislocation of business and industry that would result from their having to release young workers to attend day continuation schools during working hours. Educational opinion

therefore veered towards the alternative solution of the problem. There was an increased demand for places in secondary schools, and to meet it a rapid expansion of provision. Thus whereas in 1914 the number of pupils in secondary schools in England and Wales was 187,000, by 1920-1 it had risen to 337,000.

The demand for *secondary education for all*, which was a common feature both in countries enjoying democratic forms of government and in those under the control of dictatorships, became associated in Great Britain with the realization that it would be desirable to have varied and perhaps new types of post-primary education to meet the needs of pupils differing in ability and interests from those previously in attendance at secondary schools. Accordingly, the Consultative Committee of the Board of Education, which in 1926 issued the famous report on *The Education of the Adolescent*, commonly known as the Hadow Report, not only recommended the compulsory raising of the school-leaving age, but also set out a scheme for reorganizing education. This involved several new features, the chief of which were differentiation of provision for secondary education, a clean cut at about the age of 11 + between primary and post-primary education, and an end-on arrangement between primary and all forms of secondary education.

By the time of the outbreak of the second World War, some Local Education Authorities had almost completed the reorganization of their schools on the Hadow plan ; others had proceeded to reorganize 50 per cent. or more of their schools, but there were still some who had not seriously tackled the problem. Under some Authorities, new senior, central and junior technical schools, with appropriate provision and amenities for adolescents, had been built ; but under others, the pupils who failed to gain entrance into the secondary (grammar) schools were

either retained in their elementary schools or were reshuffled and sent into other schools, ill-designed and often inappropriately staffed for the secondary stage of education.

Although there have undoubtedly been valuable experiments in senior, central and junior technical schools, it must be frankly confessed that the general results of Hadow reorganization have been disappointing. The cheap solutions of the problem of the education of adolescents which have been attempted do not go deep enough. It may be argued that the economic depression and the devitalizing conditions of large-scale unemployment, which soon followed the 1914-18 War, made these inevitable. Be that as it may, this at least is clear: in many of the new schools teachers have not been provided with the basic conditions for success in the education of adolescents. For example, there has so far been no actual raising of the school-leaving age. Not only were the provisions of the Fisher Act concerning adolescent education never implemented, but the date of the operation of another Act, passed in 1936, to raise the school-leaving age from 14 to 15 was indefinitely postponed by the outbreak of the second World War. In actual practice, too, there has been little reduction in the size of classes and little recognition of the secondary status of the newer forms of adolescent education. Nevertheless, the three Hadow Reports¹ stand out as the first big-scale recognition by Britain that its educational system should be adjusted to meet the needs of each stage of development and to fit all the varieties of individuals for whom provision should be made.

After the rapid expansion of secondary education which characterized the years immediately following the

¹ *The Education of the Adolescent*, H.M.S.O., 1926; *The Primary School*, H.M.S.O., 1931; *Infant and Nursery Schools*, H.M.S.O., 1933.

Fisher Act, the development of provision in this country proceeded steadily, though slowly, compared, for example, with the expansion in the United States of America. Thus, whereas in 1920-1 the number of pupils in secondary schools in England and Wales had reached 337,000, by 1938 it had increased to 569,192, representing about 13 per 1000 of the population. In addition, there were 191,629 young people, over the age of 14, given time off from industrial or commercial employments to attend classes in day continuation schools; and there were also some adolescents who after full-time work voluntarily attended evening classes in technical, commercial or general subjects. Roughly, for every pupil who passed on to the secondary school or who continued to receive part-time instruction in some other educational institution, there were four whose formal education ceased at the age of 14. Thus at the outbreak of war four-fifths of the youth of this country were not having a fair chance of many-sided development, and there was a serious wastage of the most valuable of all national assets—the creative powers of the next generation. And this in a so-called democracy!

It is true that in the period between the two Wars many voluntary organizations—such as the Scouts, Guides, the Urdd, Boys' and Girls' Clubs, Church Lads' Brigade and Girls' Friendly Society—had developed and had done very useful work in training and guiding boys and girls by encouraging them in the right use of their leisure. The Government war emergency "Service of Youth" scheme, utilizing and co-ordinating the work of these voluntary bodies and encouraging the setting-up of pre-service youth organizations, has also been of undoubted value under war conditions, but it by no means meets the basic needs of the adolescent population of a democracy. The old view—primary education for the

poor, secondary and higher education for the rich—has fortunately now been superseded : but the view implied by some enthusiasts for the “ Service of Youth ” movement—primary education for all, secondary education for the clever and voluntary attendance at Youth Clubs for a small proportion of the remainder—is also fundamentally inconsistent with a democratic order of society.

This has become increasingly clear as the clash of ideologies in the second World War has sharpened and refined current views of democracy. The one side regarded the individual as subservient to the State, his chief duty that of obedience to the Government, and the use of force against individuals, groups and nations as justifiable in the interests of that State. The other side regarded the free development of the individual as essential to the well-being of society, the moral law within him as higher than the laws of State, and “ the abandonment of the use of force and the outlawry of war ” as the great objective at which to aim in human society.

There is one lesson that true democrats need to learn from their opponents, namely, that a changed social order (no matter in what terms it is conceived) cannot be brought about by changes of government or by political legislation alone, although these may be necessary. Germany realized clearly before the War that her objectives could not be reached by political changes alone, but must be prepared for and reinforced by an appropriate system of education. From the Kindergarten to the University there was an unmistakable emphasis on physical prowess, toughness, battle practice, obedience to leaders, loyalty to party and sacrifice of the individual for the State. Critical thinking was discouraged ; independent judgment on the part of individuals was repeatedly undermined by the use of uniforms, symbols,

salutes and incantations calculated to weld individuals into herds and eventually to produce a powerful war-machine. The myth of a super-race was imposed by propaganda, contrary to all scientific evidence, the individual thus being wire-pulled to sacrifice himself.

Nowhere was the process of regimentation more effectively carried out than in the Youth Movement. At first this was stated to be a supplement to the work of the schools. But when membership of the Hitler Youth Movement became compulsory and boys and girls were forced away from their families, the movement developed into the training of a disciplined and mechanized army, with fourteen different ranks and with millions of soldiers between the ages of 10 and 18. Even the girls' side of the movement was militarized, though the emphasis here was on *producing* heroes ready to die for Germany. German education in the years immediately preceding the War has been justly described by Ziemer as "education for death," if not the death of the body, at least the death of individuality.

In this country we are only beginning to plan education to be appropriate for the kind of society and the conception of human life for which we have fought. The fact that the Butler Education Act of 1944 is the first major measure of post-war reconstruction to become law is not without significance. It suggests that we have at last realized that education is not the Cinderella of the national services, but is rather the inner spiritual side and the means of fulfilment of other reform movements. Many other measures of social reconstruction are being prepared, but the chances are that they will prove abortive unless there is a corresponding push *from the human end*.

The provision of harps, even of golden harps, would not make a heaven if the individuals to whose care they

were entrusted had no musical ability and had received no musical education. Similarly, there can be no true democracy until men and women living under a democratic form of government are educated to exercise their own judgments on civic, social, national and international questions. Most of them at present can be manœuvred and played upon by mountebanks at elections. They can be frightened by scares without foundations. They can be brought to heel by a slogan or a peroration. Before there can be a functioning democracy they must be better educated. And since *all* normal adults, both men and women, rich and poor, clever and dull, are being admitted to the full rights of citizenship in this country, they must all receive an education which will enable them to discharge their responsibilities without endangering the community. In short, there must be a system of education appropriate for a functioning democracy and capable of producing a co-operative and well-integrated society, based on ideals of freedom, service, morality and peace.

The Butler Education Act undoubtedly provides the general framework within which great advances towards a truly democratic system of education become possible. There is embodied in it an acceptance of the first principle of democracy, namely, that of the value of each individual and of his consequent right to opportunities for full and many-sided development. There is a clear recognition of the essential continuity of the educational process and of the need for appropriate provision for each stage of development and for all varieties of ability and aptitude.

The chief provisions in regard to the period of youth are that there should be secondary education for all after the age of 11 +, the school-leaving age being raised first to 15 and subsequently to 16, that there should be variety of provision to suit differences of ability and

aptitude, and that for all who do not remain full-time in educational institutions there should be compulsory part-time continued education until the age of 18. It will be observed that these provisions combine and complete the recommendations concerning youth of the 1918 Fisher Act, the Hadow Committee and also of the 1936 Act for the raising of the school-leaving age. It is to be hoped that there will be no unnecessary delay in bringing in these long over-due reforms, and that within the framework of the Butler Act they will now be implemented in accordance with the positive knowledge that has meanwhile accumulated concerning the nature and needs of adolescents and without denial of the principles of true democracy.

NOTES ON FURTHER READING

G. Ziemer's *Education for Death* (Constable, 1942) and P. F. Wiener's *German without Tears* (Cresset Press, 1942) are detailed descriptions of German education under the Nazi régime.

The White Paper on *Educational Reconstruction* (H.M.S.O., 1943) issued in explanation of, and preparation for, the Butler Education Bill differs from the 1944 Act in certain details, but gives an easily intelligible account of the main features of that measure.

CHAPTER II

PSYCHOLOGY AND EDUCATION

It is more than a hundred years since that great educational reformer, Pestalozzi, expressed the desire to "psychologize" education. He realized that rule-of-thumb methods of teaching may not only fail to reach their objective, but may be positively harmful if they are not based on the laws that govern human development. The relatively late appearance of the biological and psychological sciences has, however, meant that the fulfilment of his wish is only now becoming possible through the accumulation of positive and tested knowledge of the springs of behaviour.

To-day it is little more than a truism to say that if a teacher is going to teach John Latin, he must know both the objects of the verb "teach," namely, John and Latin. In theory, at least, it is recognized that it is no more possible to teach John Latin without understanding John, his learning processes, his interests and the laws and stages of his development, than it is to teach him Latin without knowing the Latin. There is, however, still a lingering belief that a teacher may pick up his knowledge of John by haphazard methods without special study and training, just as it used to be thought possible to teach Latin by learning one chapter ahead of the pupils. In a certain number of cases this unscientific method may chance to be a success. There are apparently "born" teachers who do not need psychology, just as there are successful bone-setters whose insight into anatomy is largely unconscious. But this is no argument against the view that the modern arts of medicine and education

depend on certain sciences, and that in general the practitioners should be aware of the scientific bases of their respective arts. Further, in education, as in medicine, the limit of improvement through the use of rule-of-thumb methods arrived at by individual tact has undoubtedly been reached, and further developments in the technique of education are coming through a more exact and scientific knowledge of the stages of human development and of the springs of behaviour that operate at each stage and in each individual. Already infant school workers have a highly developed technique of education due to systematic child study and to the concentration of their attention on the *individuals* being educated. On the other hand, University professors and lecturers are usually so occupied with their *subjects* of study that they tend to ignore educational methods as such. Somewhere between these two extremes will be found most teachers at work in primary and secondary schools.

Although technical proficiency in the art seems thus to vary inversely with the stage of education, it is no exaggeration to say that the whole teaching profession is rapidly becoming aware of the need for the moulding of educational methods in accordance with the interests and natures of the individuals being educated. But even yet it has not been widely realized that educational problems of an administrative nature must also be looked at from this angle. The organization of education, both national and local, should be fashioned in accordance with the needs, interests and abilities of the human beings for whose sake the system came into being. Administrators, Local Education Authorities, and even the Ministry of Education, in fact all who are concerned with creating, improving or interpreting an educational policy, should keep at the centre of their thoughts the needs and natures of the individuals for whose sake the educational system

is being devised. It is, of course, true that economic, historical and other factors have also to be taken into account, but these are far less likely to be overlooked than psychological factors. The coat must, indeed, be cut according to the cloth, but it must also be cut according to the would-be wearers. Merely to cut it according to the cloth, and then to find that it does not fit the stages of development and the types of individuals for whom it was intended, would be to involve the nation in a form of expenditure which no economist could justify.

The movement for the extension and reorganization of adolescent education in this country, which was such a marked feature of progressive thought in the period between the two World Wars, has now culminated in the passing of the 1944 (Butler) Education Act. The chief provisions of this Act offer a great opportunity for evolving a child-centred system of education ; and that part of it concerned with youth provides a unique chance for psychologizing adolescent education. Enough is now known of the period of adolescence to justify the application of physiological and psychological knowledge to the solution of the relevant problems. Within the general framework of the provisions of the Act, we can now proceed to plan in greater detail the appropriate and diverse forms of education which will be needed to fit the known nature and needs of adolescents. What modifications in traditional organizations and practice, in content and methods, will be desirable when the facts of adolescent psychology are brought to bear on the educational problems that relate to this stage of human life ?

It is the purpose of this book to attempt to answer this and allied questions, but before applying the findings of modern psychology concerning adolescence to the appropriate range of educational problems, it will be

necessary to consider the relation that should exist between psychology and education, in order that some clear principle of selection of psychological facts may be devised which will guide their subsequent application. An applied science usually has its own distinctive methods, which are at least partially dependent on its special province. Educational psychology is no exception to this general rule ; and it is important, at the outset, that the limitations of psychology should be explicitly realized, and the distinctive methods which the applied science can legitimately employ should be clearly conceived.

Psychology might be defined as the positive science of the springs of behaviour. It uses scientific methods—observation, experiment and statistical inquiries—to investigate different forms of behaviour ; and it discovers regularities in, and explanations of, the varying types. The pure psychologist is not concerned with how people should behave, but rather with how they do behave under specified conditions. The consideration of *ideals* of conduct lies outside his province. He is not more concerned with the behaviour of saints than of sinners. Indeed, usually he finds the sinner more provocative of thought and consequently more interesting. *Qua* psychologist, he has no opinion as to whether individuals in a democratic community should be educated or not, whether this or that habit should be acquired, or this or that subject be learned. He is concerned with what *is* and not with what *ought to be*. But if it is decided that every normal individual in a democratic order of society should be educated according to his abilities and aptitudes and to fulfil the duties of citizenship, the psychologist can give valuable advice as to the period of education and the methods to be used to obtain the desired results. Similarly, if the educationist decides that a certain form of behaviour should be encouraged, the psychologist can

give information regarding the laws that govern such behaviour which, rightly applied, will enable the desired objective to be more surely and more easily reached. It will thus be seen that in the *applied* science, individual ideals, social objectives and ultimate values—in short, the aims of education—must be constantly considered, for it is these that govern the selection of the facts and laws that are relevant in any particular case.

The special functions of the *applied* science of educational psychology will also have their effects on the methods employed in its investigations. The educator is naturally more interested in the growth and development of an individual than in detailed analyses of one type of process, and although no such analyses should ever be ruled out of consideration, there will be a natural tendency in educational psychology to emphasize genetic and synthetic methods of study.

There are obviously two fairly sharply contrasted approaches to the study of human personality. There is first the method of sympathetically following the development of an individual's experience as from within, appreciating its articulations, but never breaking its continuity. This might be termed the humanistic approach. In the main, it is the method employed by the novelist who unfolds the inner history of his characters, and whose descriptions are consequently full of warmth and intimacy. Galsworthy's *Forsyte Saga*, H. G. Wells' *Mr. Britling Sees it Through*, *The World of William Clissold* and *Mr. Blettsworthy on Rampole Island*, Hugh Walpole's *Jeremy*, and May Sinclair's *Arnold Waterlow* are outstanding modern examples of the method which found earlier successful exponents in Charlotte Brontë and George Eliot. The method is historical and genetic, the reader being led to understand the inner meaning of an experience by sympathetically living

through that which led up to it. There is one obvious objection to the novelist's method, namely, that the people described may not be real people, and the experiences apprehended may not be real experiences, nor in their right setting. In short, there is no possibility of an objective test of accuracy.

The other method of approach—the analytic—does admit of such tests of accuracy and, indeed, of the general application of the ordinary methods of science. Some type of mental process, some crosscut in the continuity of an individual's experience, may be singled out for special attention. It may be investigated with detachment and perhaps by experiment, and comparisons may be made between this experience and similar crosscuts in other individuals. The knowledge gained by these means must certainly be regarded as positive, and may very well be of great practical value. For example, the use of statistical and experimental methods in the investigation of colour-blindness has revealed the chief types that occur and certain regularities in their occurrence, as for example, which is the commonest kind, and what proportions of each of the two sexes suffer from the different defects of colour-vision. Such an investigation may be of practical use in the devising of tests for entrance to a form of employment which requires perfection of colour-vision. Intending engine drivers should obviously be tested for green-red colour-blindness, for red is a sign of danger which they should have no difficulty in recognizing.

One has only to contrast this analytic treatment with the historical method of dealing with an allied experience to be made to realize its serious limitations. For example, Kipling in *The Light that Failed* makes his reader understand the onset of blindness in the artist, Dick Helder, by revealing it in its manifold relations to the ambitions,

desires and drives of conduct which had actuated the hero previously. The crisis is apprehended in its distinctive setting, its nuances of meaning and its unique quality in the experience of Dick Helder being grasped by the sympathetic understanding of the main currents of his inner life. Whatever practical value scientific investigations of isolated mental processes may have, it cannot be denied that in a sense the positive results are obtained by a reconstruction of actual experiences. Every experience is individual; it is part of a unique movement, a duration, an unfolding in time; and to break the continuity by considering one mental process out of its setting, thus separating it from its "before" and "after," is a device which may be practically useful but may very well also be misleading.

The analytic method tends to emphasize the common elements in the behaviour of different individuals, and consequently to let slip the rich individuality of each person. It is this fact which accounts for the humanist's fear of the scientific approach to the study of human personality. "From all enumerations of the brethren," he prays in the person of Dr. L. P. Jacks, "from all that reduces them to an average or adds them up into a mass, from all statistics of the saved and the lost, from all Government returns of virtue and vice, from all that measures our happiness in solid blocks or weighs it in tons *avoirdupois*—good Lord deliver us; and help us to know each son of man not by his number but by his Name."¹

Fortunately for education, some modern psychologists are beginning to realize that it is possible to combine the best of these two contrasted methods. The results of scientific analyses can be re-synthesized, and a genetic or historical method be superimposed on an analytic

¹ L. P. Jacks: *From the Human End*, 1918, p. 3.

method, applied to real and not merely imagined experiences. As early as 1896, the French psychologist Ribot indicated the possibilities of the genetic method in the study of the emotional aspect of experience.¹ A later remarkable example of the advantages of combining scientific and humanistic approaches to the study of personality is Shand's great work *The Foundations of Character*.² Exponents of the new school of Individual Psychology also consciously realize the need for syntheses as well as analyses of concrete individuals. The discovery of the life-line of an individual is regarded as supremely important, and increasing emphasis is therefore laid on dreams and day-dreams which may indicate the direction in which the life-movement of an individual is being thrown. "Individual psychology," says Adler, "by starting with the assumption of the unity of the individual, attempts to obtain a picture of this unified personality regarded as a variant of individual life-manifestations and forms of expression. The individual traits are then compared with one another, brought into a common plane and finally fused together to form a composite portrait that is in turn individualized."³

It is this combined method which will give some insight into concrete individuals which should tend to be emphasized in educational psychology. Child study was its historical forerunner, but in the early days analyses were frequently obtained by prejudiced and untrained observers and without specified conditions. The newer educational psychology should have a higher standard of accuracy and more scientific methods for the discovery of its facts, but it should also emphasize the need for apprehending the continuity of each individual's experi-

¹ T. Ribot : *The Psychology of the Emotions*, Eng. tr., 1911.

² A. F. Shand : *The Foundations of Character*, 1918.

³ A. Adler : *The Practice and Theory of Individual Psychology*, p. 2.

ence and thus of grasping the individual as a whole. It should combine what is best of both the humanistic and scientific approaches to the study of human experience, its syntheses being based on analyses derived from careful observations and experiments, but so combined that there is no distortion of the "duration" or life-history of each individual.

In the following study of the period of youth, the questionnaire method of investigation has been used. It will be generally agreed that this method is only suggestive and needs to be supplemented by more objective measurements and observations. There is, however, one great advantage in such a method, namely, that the data obtained can be viewed both analytically and synthetically. Any common element in the experiences of the subjects of the inquiry can be considered in abstraction; and the experiences of any one subject can also be viewed as a whole. The evidence from the use of a carefully drawn-up questionnaire on youth, checked by other methods, will consequently be used in this book for the presentation of the chief psychological facts which need consideration. It should perhaps be pointed out that although the period of adolescence has been separated from its "before" and "after" for purposes of study, in reality each individual develops continuously, and no hard-and-fast line can be drawn either between his childhood and youth or between his youth and maturity.

NOTES ON FURTHER READING

In his book entitled *Psychology* (Home University Library, 1912) Professor W. McDougall gives a clear outline of the province, methods and departments of psychology. The first chapter in his larger work *An Outline of Psychology* (Methuen, 1922) is a more technical exposition of the same theme. McDougall's general position that psychology is concerned with *subjective* experiences or the *springs* of behaviour contrasts somewhat

sharply with the Behaviourists' view of psychology as a purely *objective* science of behaviour which finds one of its chief exponents in Dr. J. B. Watson, author of *Psychology from the Standpoint of a Behaviorist* (Philadelphia, Lippincott, 1924) and *Behavior: An Introduction to Comparative Psychology* (New York, Holt, 1914). The two protagonists have debated the issue publicly, and some of the heat of the debate is clearly reflected in the articles entitled "In Defence of Behaviorism" by J. B. Watson and "The Fundamentals of Psychology—A Reply to Dr. Watson" by W. McDougall, published in *Psyche*, July 1924.

Professor Thorndike's great work on *Educational Psychology* (New York, Teachers' College, Columbia University, 1910-13) is probably the most exhaustive attempt yet made to outline the problems and define the province of the applied science of educational psychology. Professor G. H. Thomson's *Instinct, Intelligence, and Character: An Educational Psychology* (Allen & Unwin, 1925) and Dr. C. Fox's *Educational Psychology* (Kegan Paul, 1925) will also be found to be useful treatments of some of the outstanding problems of educational psychology. Professor T. P. Nunn's article on "Psychology and Education" in the *British Journal of Psychology*, March 1920, deals explicitly with the problem of the relation between the pure science of psychology and education.

CHAPTER III

THE CRITICAL NATURE OF ADOLESCENCE : SECONDARY EDUCATION FOR ALL ?

THE whole experience of a normal individual, from birth or even before it until death, is a continuity or duration. Viewed retrospectively, it may appear to be a succession of states, but it is so "profoundly animated with a common life" that "in reality no one of these states begins or ends but all extend into each other."¹ Although each human being's experience is thus individual and unique, there are common features to be distinguished in the life-histories of all normal individuals. There is, for example, a common periodicity. There are daily periods, with their alternations of activity and sleep ; weekly periods, with one day's rest in seven ; and longer seasonal periods. These are gross and obvious articulations, which tradition has clearly recognized and which therefore cannot easily be overlooked. But there are subtler periods of physical and mental growth, and it is inattention to these that sometimes makes our educational system woodenly inappropriate. That there is a common rhythm in the unfolding of the life-histories of individuals has been generally recognized by novelists and dramatists, even when they have been more directly concerned with the uniqueness of the experience of each individual.

" At first the infant,
Mewling and puking in the nurse's arms.
And then the whining school-boy, with his satchel,

¹ H. Bergson : *An Introduction to Metaphysics*, tr. T. E. Hulme, 1913, pp. 9-10.

And shining morning face, creeping like snail
Unwillingly to school. And then the lover,
Sighing like furnace, with a woful ballad
Made to his mistress' eye-brow. Then a soldier,
Full of strange oaths, and bearded like the pard,
Jealous in honour, sudden and quick in quarrel,
Seeking the bubble reputation
Even in the cannon's mouth. And then the justice,
In fair round belly with good capon lin'd,
With eyes severe, and beard of formal cut,
Full of wise saws and modern instances ;
And so he plays his part. The sixth age shifts
Into the lean and slipper'd pantaloon,
With spectacles on nose, and pouch on side ;
His youthful hose, well saved, a world too wide
For his shrunk shank ; and his big manly voice,
Turning again toward childish treble, pipes
And whistles in his sound. Last scene of all,
That ends this strange eventful history,
Is second childishness, and mere oblivion,—
Sans teeth, sans eyes, sans taste, sans everything."

The facts of physical growth suggest very clearly certain common articulations in the development of normal individuals after birth. There is first a period of very rapid growth, as measured by average increases in height and weight, during the first year of life ; then a period of slower growth, extending to about five years of age ; then a time of rapid development up to about seven, followed by a period of steady but less rapid growth to about eleven or twelve years of age. The next stage is marked by a considerable acceleration in the rate of growth, reaching its maximum in the case of girls at 13 and in the case of boys at 15, and afterwards slowing down until growth practically ceases in the early twenties.¹

¹ Report of the British Association, 1883.

A. Greenwood : *The Health and Physique of School Children*, 1913.

H. A. Harris : Appendix II, *The Primary School*, H.M.S.O., 1931.

B. T. Baldwin : *The Physical Growth of Children from Birth to Maturity*. University of Iowa Studies, 1921.

The period from about 11 + to 21 years of age is usually regarded as the period of youth or adolescence, the first half being characterized by very rapid growth and consequent instability, and the second being a sub-period of consolidation. Then comes the period of maturity, and finally the period of old age. Infancy, childhood, youth, maturity and old age—these are the common articulations of human life-histories, although the development of each individual is both unique and continuous.

The third of these periods, youth or adolescence, is recognized by novelists and psychologists alike as being critical in the life-history of an individual. In some cases, to which perhaps novelists have done more than justice, it is a period of storm and stress. For example, while Charlotte Brontë's study of Jane Eyre cannot be regarded as in any sense a picture of a typical adolescent, it is undoubtedly an illuminating description of the responses which an unstable adolescent might be expected to make to conditions and human relationships which were markedly unnatural. George Eliot's vivid picture of this growing-up period in the case of two adolescents with sharply contrasted temperaments, namely, Tom and Maggie Tulliver, is perhaps even more illuminating to educationists; for, while it emphasizes the critical nature of the period, it avoids any false assumption of uniformity.¹ May Sinclair's study of Arnold Waterlow, Hugh Walpole's stories of the sturdy Jeremy at Crale and of Peter Westcott in *Fortitude*, J. S. Mill's autobiographical account of the period and Van Druten's Young Woodley all bear witness to the truth that the period is one of risks and adventures.

However valuable to educationists these humanistic studies of the period may be, the more analytic investi-

¹ George Eliot: *The Mill on the Floss*.

gations of psychologists are also necessary, if only to define the period more accurately, to reveal the experiences of *ordinary* as opposed to *unusual* adolescents and to emphasize the common elements in their development. Dr. G. Stanley Hall,¹ whose two-volumed work is of historic interest, draws the conclusion that, while late childhood under modern conditions of civilization is a period of almost complete adaptation to environment and is possibly the counterpart of a time in the early history of the race when maturity was attained in these early years, adolescence is a period of transition when the forces and tendencies previously harmonized break up again and recombine. It is a new birth of higher and more completely human traits, the entrance of the individual into the larger life of the race. A similar view is adopted by Dr. J. W. Slaughter,² who is careful to point out that the length of the period of youth increases with advancing civilization and is one of the most characteristic differences between savage and civilized people. Dr. Phyllis Blanchard's³ investigation of adolescent girls and Dr. Stanford Read's⁴ study of male adolescence likewise emphasize the critical nature of the period, which is characterized not only by rapid physical growth but also by the maturing of the sex organs. Dr. Charlotte Bühler⁵ goes so far as to affirm that the increased activity of the ductless glands and the onset of sexual maturity seem to disrupt the balance of the organism so completely that the psychic equilibrium also suffers. Dr. Leta Stetter Hollingworth,⁶ though critical of this hypothesis

¹ G. S. Hall : *Adolescence*, 1904. Preface.

² J. W. Slaughter : *The Adolescent*, 1911.

³ P. Blanchard : *The Care of the Adolescent Girl*, 1921.

⁴ C. Stanford Read : *The Struggles of Male Adolescence*, 1928.

⁵ C. Bühler : *From Birth to Maturity*, 1935.

⁶ L. Hollingworth : "The Adolescent Child," *A Handbook of Child Psychology*, 1933.

concerning the relationship between glandular changes and emotional upheavals, concludes from her valuable studies that during this period the human being must normally pass completely from one set of habits to another and from one set of values to another. He has to break habits of obedience and dependence, which are proper to an immature child, and must, on the other hand, build up habits of self-determination and of self-support which are suitable to an adult. Youth is, therefore, "a period which is hardly equalled for perplexity and uncertainty of status, save for accident, by any other developmental phase of life."

In many respects, as Dr. Ernest Jones¹ has shown, youth is more closely parallel to infancy than to the intervening period of childhood, which is relatively stable and has some of the characteristics of maturity. It is a period of new adaptations and creative developments, and is therefore fraught with far-reaching consequences. It is not necessarily unhappy or tragic—indeed, some writers, notably Dr. Stanley Hall, have over-emphasized the "storm and stress" of the period—but it is critical in the sense that there is a new accession of creative energy which expresses itself in many ways, and which, rightly disciplined and controlled, will lead to full adaptation of the individual to his social and spiritual environment. Just as infancy may be regarded as the period for the adaptation of the individual to the physical universe, so adolescence reveals itself as pre-eminently the period of adaptation of the individual to society and to the spiritual universe.

Recent studies of juvenile delinquency also provide indirect evidence of the instability of the period of early adolescence. Thus more than one-half of the cases of

¹ E. Jones: "Some Problems of Adolescence," *British Journal of Psychology*, July 1922.

juvenile delinquency investigated in London by Professor Cyril Burt were between the ages of 12 and 15.¹ The statistical investigations of Carr-Saunders, H. Mannheim and E. C. Rhodes also show that the proportion of juvenile delinquents per 100,000 of population of the same age is greatest between 12 and 16 and reaches a pronounced climax at 13.² There is similar evidence in regard to behaviour difficulties which do not amount to actual delinquencies. Thus while the 4,454 problem children brought to the Illinois Institute ranged in age from 1 to 17, the peak for both sexes was at age 14.³

The critical nature of early adolescence constitutes the strongest argument in support of the view that a democratic community should make provision for some form of *secondary* education for all boys and girls. It is not only the clever boy or girl who needs guidance in this most critical growing-up period: the dangers of instability and the difficulties in self-control are as great, if not greater, in the case of less academically minded adolescents. To pitchfork these into industrial, and often into blind-alley, occupations, before they have gained control of their newly acquired powers, is to court disaster, both for the individuals themselves and for the society of which they will become responsible citizens. Child labour is almost inconceivable to this generation. Future generations will perhaps find it equally difficult to justify the present practice of sending into the labour market, in many cases without any adequate system of apprenticeship, fourteen-year-old adolescents, who in some respects are further removed from maturity than are ten-year-old children.

The only policy that meets the psychological facts is

¹ C. Burt: *The Young Delinquent*, 1925.

² A. M. Carr-Saunders, H. Mannheim and E. C. Rhodes: *Young Offenders*, 1943.

³ L. Ackerson: *Children's Behaviour Problems*, 1931.

that of primary education for all *children*, and secondary education for all *adolescents*, at least during the time of greatest instability. The second half of this policy is perhaps even more necessary than the first, because of the greater needs of adolescents and the greater chances of growth. But in any case to adopt only the first half is false economy. It is as though a gardener were to tend his plants until the buds appear only to pluck them up by the roots in order to avoid the additional expense that would be involved in continuing their cultivation to the fruit-bearing stage. It is "spoiling the ship for a ha'p'orth of tar." It is a case of killing the goose before it lays the golden egg.

It would be idle to suppose that the modern movement for the continued education of adolescents in our own country is the direct outcome of any clear realization of the critical nature of the period of youth. The provision for part-time continued education in the Education Act of 1918 and the subsequent movement for increased secondary school accommodation, for the provision of central and senior schools and for the raising of the school-leaving age were due more to a growing faith in education than to purely psychological considerations. Perhaps the Consultative Committee who reported on the Education of the Adolescent in 1926¹ were to some extent influenced by the views of psychologists, but they were probably much more impressed by the evidence of practical teachers concerning the incompleteness of the educational process, and the futility of the "marking of time" in primary schools by scholars who fail to gain entrance into secondary schools. Yet the insistence in the Hadow Report on the necessity for raising the school-leaving age to 15 +, and providing different types of secondary education to meet varying needs, and on the

¹ *The Education of the Adolescent*, H.M.S.O., 1926.

desirability of a "clean cut" in the educational system at 11 + with an "end-on" relationship between primary and all forms of secondary education, marks a stage in the process of psychologizing adolescent education in this country.

Within recent years not only has there been a marked growth of interest among British psychologists in the study of adolescence but similar developments have occurred in Germany, the United States and Russia. These may not be unrelated to the various Youth Movements which have arisen in these countries. In any case, the publicity given to the movements has done much to focus the attention of the general public on the known facts concerning the period. An added interest in the needs and characteristics of youth has been especially evident in this country since the outbreak of the second World War. The realization by the whole nation of the debt which it owes to the courage, skill and adventurousness of youth has had the effect of increasing its determination to do justice in the future to its greatest national asset. During the passage of the Butler Education Bill through the Houses of Parliament, this was reflected in the general agreement of the various political parties concerning the need for the extension and reform of adolescent education. There were, of course, differences of opinion regarding the actual proposals, the appointed days on which the reforms would begin to operate and the order of urgency of the various provisions, but the Government's declared purpose "to ensure a fuller measure of education and opportunity for young people and to provide means for all of developing the various talents with which they are endowed and so enriching the inheritance of the country whose citizens they are"¹ was not contested by the Opposition. Slow as the

¹ *Educational Reconstruction*, H.M.S.O., 1943, p. 3.

awakening had been, the critical nature of youth was at last clearly recognized.

NOTES ON FURTHER READING

Hugh Walpole's study of the development of Peter Westcott in *Fortitude* (Martin Secker, 1913) and H. G. Wells' story of *Kipps* (Nelson's Library) are typical modern examples of the recognition by novelists of the creative nature of the period of youth. J. S. Mill's *Autobiography* and Edmund Gosse's autobiographical account of his own development in *Father and Son* also give support to the view that the period is critical in the life-histories of individuals.

R. H. Tawney's *Secondary Education for All* (London, The Labour Party, 1922) is an enthusiastic statement of the case for continued education for all adolescents. The Report of the Consultative Committee on *The Education of the Adolescent* (H.M.S.O., 1926) considers the evidence for extending the provision for the education of adolescents and makes definite recommendations concerning general policy and for the solution of the practical problems of reorganization.

Paragraphs 27 to 35 of the White Paper on *Educational Reconstruction*, issued by H.M.S.O. in 1943, indicate the Government's views at that date of the main reforms necessary in secondary education. Paragraphs 63 to 76 deal with the proposals for further compulsory part-time education, and paragraphs 89 to 92 with the Youth Service.

CHAPTER IV

THE MAIN LINES OF DEVELOPMENT DURING ADOLESCENCE

A. PHYSICAL CHANGES

THE period of youth is a period of rapid physical growth. The body may increase in weight and height to such an extent that its control may be rendered temporarily more difficult, and the individual may pass through a hobbledehoy stage. This is more marked in the case of boys than of girls and generally occurs in the first half of the period. The smaller body of childhood may have been perfectly controlled, but its increased bulk during the first half of adolescence and the rapid development of the muscular system may result in a certain temporary awkwardness and an inability to make refined and accurate movements. It is at this stage that the boy objects to being asked to help in the serving of afternoon tea. He hardly knows what to do with his long limbs, and is therefore shy about appearing in public to do anything involving small and precise bodily adjustments. He needs time and practice to regain control of his greatly increased bulk of body.

Certain parts of his body may develop disproportionately and increase his difficulties. For example, the characteristic "breaking" of the voice is due to such rapid growth of the vocal apparatus that its control is temporarily ineffective. The boy, therefore, is uncertain as to whether he is going to begin to speak high or low, loud or soft ; and there is need for a period of readjustment before there can be the full utilization of his increased vocal powers.

The most fundamental change round which all the

other developments seem to revolve is the maturing of the sex organs. Practically all the glandular secretions are affected, and it is no exaggeration to say that in the case of boys and still more in the case of girls the whole metabolism of the body is thereby modified. The physical condition of the sex organs, especially in the case of boys, may also bring new difficulties of control.

These profound and relatively rapid physiological changes during adolescence increase the liability of the individual to certain minor defects and diseases. In the case of girls, the fact that the calcium metabolism of the body becomes unstable means an increased danger of anæmia, spinal curvature and certain nervous disturbances. The magnitude of this danger is revealed by recent reports on the health of secondary school pupils. For example, Sir W. Hamer's investigations on some 2,000 London secondary school girls yielded the astounding figures that 7·8 per cent. suffered from anæmia and 16·7 per cent. from spinal curvature ; 7·1 per cent. had flat feet and 15·2 per cent. wore spectacles.¹ The fact that there was an increase in the proportion of defects from 12 to 15 years of age, and that the proportion was higher than for the corresponding age-group of elementary school girls, suggests that we have not yet succeeded in adjusting secondary education to the physical needs of girlhood. In the case of boys there is an increased liability to certain kinds of lung and heart trouble, but the dangers of physical strain do not seem to be nearly so great as in the case of girls. According to Sir W. Hamer the proportion of both boys and girls with defective eyesight increases from the lower forms to the middle forms of secondary schools. This increased liability to defects and ailments is of course only the backwash of a wave

¹ *The Health of the School Child* (Report of Chief Medical Officer of Board of Education for 1921), published 1922, p. 32.

of development which in the majority of cases leads without difficulty to increased size and power and to full physiological maturity; but it is surely not without significance in the formulation of a policy for the extension and reform of adolescent education.

B. MENTAL CHANGES

Connected with, though in some cases apparently antecedent to, these physical changes there are also mental developments. Dr. G. Stanley Hall records that among 200 people of note whose biographies were examined by Lancaster there were 120 who developed a craze for reading during adolescence, 109 who became great lovers of Nature, 58 who took to writing poetry, and 46 who developed scientific interests.

In enumerating the traits characteristic of puberty Dr. Hall mentions several which must be regarded as intellectual developments. For example, in addition to increased sensibility of touch, taste, smell, hearing and sight, he affirms that there are new powers of imagination and of inner absorption and reverie, and that there are noticeable tendencies towards the enlargement of vocabularies. There is also a new spirit of inquiry and a new interest in Nature and Religion.

With a view to obtaining tentative evidence with regard to the mental changes characteristic of adolescence, a questionnaire was carefully formulated, which was answered by groups of volunteers under controlled conditions. The volunteers understood that the answering of the questions would be a valuable preliminary to their subsequent study of adolescence. They were allowed to substitute initials or pseudonyms for their names if they so desired; and were asked to be as accurate as possible and to leave out any question which they could not answer truthfully. They wrote their

answers under examination conditions, that is, without discussion ; but without any time limit.

The following was the questionnaire :

ADOLESCENCE

NOTE.—Adolescence should be interpreted to mean the period from about 11 or 12 to about 20 or 21 years of age.

A. Particulars to be filled in below :

Name or Initials Nationality.....
 Age Sex
 Home conditions during Adolescence (i.e. whether parents were living, number of brothers and sisters, etc.)

 Secondary School (Girls', Boys', or Mixed) (with rough dates)

 Post-School Occupation (with rough dates).

B. Questions (to be answered on examination paper and attached) :

1. Indicate any developments in intellectual interests which occurred DURING ADOLESCENCE. For example, what were your favourite occupations and your favourite subjects of study ? Account as far as possible for your preference.
2. Do you remember having systematic day-dreams (a) during childhood, and (b) during adolescence ? If so, of what kind ? Do they still continue ?
3. Can you remember any difference in your appreciation of Nature, Music, Art and Poetry DURING CHILDHOOD and ADOLESCENCE ?
4. Describe briefly the kind of religious training that you received DURING CHILDHOOD and ADOLESCENCE.
5. What kind of religious experiences (if any) did you have (a) during childhood, and (b) during adolescence ?
6. Did you experience "conversion" ? If so, when ? What form did it take ?
7. Did you experience doubts (a) before, and (b) after conversion ? If so, of what kind ?
8. Were you interested in the opposite sex during adolescence ? In particular, did you fall in love (a) with anyone much older than yourself, and (b) with someone of your own age ? If so, when ?

9. Did you make life-long friends at this period ?
 10. Did you hero-worship someone of your own sex ?
 11. Were you curious concerning the facts of life (a) during
 • childhood, and (b) during adolescence ? Was your
 curiosity satisfied ? If so, from what source ?

These questions were answered by groups of University students and also by W.E.A. students engaged in full-time manual and other occupations. The replies of University students, almost all of whom had passed through secondary schools of some type or other, will be first considered. This group consisted of 100 men and 100 women drawn mainly from the University of Manchester in 1924 and 1925 and from Cardiff University College in 1927 and 1928, but including also a small group of representatives of other Universities who attended the Brighton Summer School in Psychology and Education in 1923. The majority of these were graduates who had led rather sheltered lives during adolescence. There were, however, some who had had post-school occupations before joining the University, notably a group of ex-service men who are included in the numbers.

The answers to questions 1, 2, 3, 5, 8, 9, 10 and 11 are given in a classified form below :

TABLE I

Group of Students from English Universities, 135 ; from University of Wales, 65 ; consisting of 100 men and 100 women.

		Per cent.	
Q. 1.	Number who mention as a <i>favourite occupation</i> :		
Reading	97	48.5
Reading novels and biographies	. .	14	7
Games	67	33.5
Outdoor activities (e.g. walking, cycling, gardening, scouting, etc.)	. . .	52	26
Arts and Crafts (e.g. carpentry, needle- work, drawing, music, etc.)	. .	70	35
Writing poetry	12	6

		Per cent.	
Number who mention as a <i>favourite subject of study</i> :			
Literature		88	44
History (including politics)		48	24
Mathematics		62	31
Science		66	33
Geography		20	10
Theology or Philosophy		13	6.5
Q. 2.	Number who record systematic day-dreams in adolescence	128	64
Q. 3.	Number who claim an increase in appreciation during adolescence in respect of :		
	Nature	109	54.5
	Music	118	59
	Art	85	42.5
	Poetry	126	63
Q. 5.	Number who claim to have had real <i>religious experiences</i> :		
	(a) in childhood	17	8.5
	(b) in adolescence.	123	61.5
Q. 8.	Number who were interested in the opposite sex during adolescence	167	83.5
	Number who fell in love during the period	110	55
Q. 9.	Number who record important friendships	147	73.5
Q. 10.	Number who hero-worshipped someone of their own sex	101	50.5
Q. 11.	Number who were curious concerning the facts of life :		
	(a) in childhood	48	24
	(b) in adolescence.	146	73

The replies give some indication of the general lines of development characteristic of the period, at least in the case of "intellectuals."

Intellectual Developments.—The answers to the first question show that some kind of intellectual awakening is usual, although it may take different forms in different

individuals. Quite a number of students recorded a new passion for reading and a *general* increase in academic interests. About one-third developed interests which might be broadly termed scientific; they became absorbed in the study of mathematics, the physical or biological sciences and/or geography. Apparently there is an increased power of abstract thought which shows itself in an appreciation of scientific method, and in a few cases in the study of philosophical and theological questions. In a great number of cases there are new humanistic interests, which may take the form of a greater love of literature, a new interest in novels and biographies as "human documents," and/or an added interest in history and politics.

It is significant, however, that a high proportion of "intellectuals" do not find their greatest joy during adolescence in purely intellectual pursuits, but in games, outdoor activities and in more practical occupations. More than one-half mentioned as their favourite occupations either games or such outdoor activities as tramping, cycling, farming and gardening, in which mind and body are both exercised: in addition some 35 per cent. mentioned some form of handwork such as carving, carpentry, photography, drawing, painting, playing the piano, needlework, domestic work and "pottering with mechanical things." Putting these two facts together, it is surely safe to conclude that the majority of adolescent intellectuals find their greatest joy in work or play in which the growing mind and the growing body are exercised concurrently.

What evidence is there of the development and intellectual interests of the 80 per cent. of the adolescent population who leave school at 14? The registration of youth which since 1941 has been required by Order under the Defence Regulations has already led to some increase

of knowledge concerning these less fortunate adolescents. Many Local Education Authorities throughout the country have arranged for these young people to be interviewed, subsequently to their registration, and thus have been able to obtain impressions of their development. For example, in one small area in Glamorganshire the majority of the boys interviewed were found to spend their leisure time in the cinema, in playing snooker and billiards and in dancing. Few did any serious reading and only a minority attended a place of worship. Although the interviewers in different parts of the country were impressed by the desire and readiness of the young people to render some form of service, there was frequent comment on the lack of interest in, and knowledge of public and local affairs. In summing up the information which has accumulated through the registration interviews, the Youth Advisory Council in England conclude that the most popular way of spending spare time is going to the pictures; next in popularity comes dancing and third reading, though mainly of books of low quality. Comparison was sometimes made between the boys and girls who had left school at 14 and those who had left at 15 or 16. For example, in Lincoln the conclusion was drawn that boys and girls who had left school at 15 or 16 stood out at once from those who had left at 14, and that the leisure activities of the former presented a far more hopeful picture.

Teachers of pupils who remain in school have repeatedly drawn attention to the increased power of abstract thought and the new interest in reasoning processes which are characteristic of many adolescents. To these haphazard observations there has recently been added, through the use of intelligence tests, much objective evidence concerning the growth of intellectu-

¹ *The Youth Service after the War*, H.M.S.O., 1943, p. 13.

ability in individuals. The mental growth curves arrived at by Richardson and Stokes¹ in this country and by Thurstone, Terman and Thorndike² in the United States agree in indicating the steady growth of problem-solving powers throughout early adolescence and the practical cessation of the growth of general intelligence at about 16 or 17 years. Intelligence, of course, varies from individual to individual, but it tends to reach a maximum, distinctive of each individual, at about 16 or 17; a little later in the case of highly-gifted individuals and a little earlier in the case of less-gifted children. Then, and then only, does the mind of the individual, whatever may be its distinctive quality, begin, as it were, to run in top gear.

The observations from registration interviews, referred to previously, are therefore not surprising. If children leave school at 14, that is, about two years before their general intelligence matures, it is only to be expected that many of them will never become interested in public and local affairs. They are outside educational influences during the very years when their minds are most capable of tackling difficult problems. In a democracy, where each citizen is expected to make important decisions on local, national and international questions of great intricacy, there is therefore no possible justification for the cessation of training in critical thought before the age of 16.

Emotional Developments.—Towards the end of the period of childhood, the normal healthy individual is usually master of his emotions. The sentiments of self-regard and of love for his parents and friends are sufficiently developed to control his momentary feelings, and

¹ C. A. Richardson and C. W. Stokes: "The Growth and Variability of Intelligence," *British Journal of Psychology*, Monograph 1933.

² F. K. Shuttleworth: *The Adolescent Period*, 1938, Figure 232.

there is consequently a stability and poise in his emotional life which shows itself outwardly in a general consistency of conduct. Then new powerful emotions appear, and other impulses, which had perhaps made an appearance earlier, are so intensified that the whole pattern of the emotional life is disturbed. The sentiments which have developed are no longer sufficiently powerful to control the new emotions. There is an interval of emotional instability before the fundamental adjustments of adolescence are made. This instability shows itself in many ways, but chiefly in a kind of waywardness and a tendency to go from one extreme to the other. For example, the boy or girl who is ambitious and full of conceit, on occasions is also easily depressed and discouraged. The incompleteness of adjustment frequently shows itself in a tendency to day-dream and to fantasy thinking.

A day-dream usually represents the ideal fulfilment of an unconscious wish ; and the day-dreams of adolescents are often indicative of urges and desires which only late or perhaps never, find overt expression in their behaviour. The answers received to the second question :

“ Do you remember having systematic day-dreams (a) during childhood and (b) during adolescence ? If so, of what kind ? Do they still continue ? ”

showed that day-dreams are more frequent in adolescence than in late childhood or early maturity, and that there are two main kinds indulged in at this period, namely, egoistic or vocational, and sexual or romantic day-dreams.

The day-dreams recorded by the group of University students were very varied and included imagining themselves distinguished in sport—cricket, football, tennis, hockey and swimming—in the performance of heroic acts.

of life-saving or bravery in war, and in other forms of dominance, such as being "first in an examination," winning a scholarship for the University or being strikingly successful as a public speaker or a singer. In some cases, they reveal an urge for less restriction and for a more favourable environment than that which actually surrounded the adolescent at the time of dreaming. Some gained satisfaction from imaginary motor-cars, grand pianos and beautiful homes which they did not actually possess. A Manchester man imagined himself "living in the country," and a Cardiff woman day-dreamed of "being a gipsy." Quite a number gained pleasure from pretending that they had facilities for foreign travel within their reach and a few (though strikingly few) that they had great riches.

The most frequent type of day-dream was egoistic or vocational, the individuals imagining themselves as successful teachers, clergymen, musicians, missionaries, surgeons, University professors, researchers, authors, Army, Navy or Air Force officers, administrators and members of Parliament.

These egoistic and vocational day-dreams indicate an increased sense of self, a growing need for power and independence and a deep-set desire to find a vocation. They suggest that one of the major adjustments which should characterize the period is the finding of a vocation, the gaining of psychological (if not also economic) independence and the shouldering of real responsibility in the workaday world.

Another type of day-dream which was fairly common, though not nearly so usual as the egoistic, was the romantic kind, in which individuals imagined themselves falling in love or being loved, being married and having homes of their own. These imagined romances seemed to be more common among the women than the men, and

apparently served as a kind of compensation against the failure of the environment to provide the real experience. Often, both egoistic and romantic impulses expressed themselves in one fantasy. For example, one woman recorded a day-dream in which she was "pretty and very accomplished" and "with a boy at (her) feet." Another dreamed of marrying a lord and returning with him to her native village. A man imagined himself performing an act of heroism in the presence of the girl whom he loved. The vocational and romantic elements are obviously combined in the day-dream described in the following words: "During adolescence I always imagined myself the mother of a family. These imaginary children were never babies, but always boys and girls of from 10 to 15 years of age, and much in need of my help. They were quite definite types—one was a strong athletic boy (I knew him quite well); another a dreaming imaginative boy; another very naughty, and two girls. The father was always a vague person and different from time to time." There was also another interesting case in which the husband was conveniently killed off and the heroine "lived for the children" and thus presumably found freedom and a vocation.

The rise or intensification of the sex-emotion which, in the few, found indirect expression in romantic day-dreams, in the great majority expressed itself openly in an awakening of interest in a member or members of the opposite sex. Thus 83.5 per cent. of the students who answered the question:

"Were you interested in the opposite sex during adolescence? In particular, did you fall in love (*a*) with someone much older than yourself and (*b*) with someone of your own age? If so, when?"

gave answers in the affirmative. Many confessed to "falling in and out of love" continuously during the

period. There was one man, for example, who "had lost count"; and another, from a boys' secondary school, who declared, "There was some sort of competition between us as to who should do best in this respect." A number (37) fell in love first with someone much older than themselves, who acted as a kind of mediator in the transition from the love of parents to the love of a possible mate. A curate, a minister, a conductor of an orchestra, an actor, a schoolmaster and a music mistress figured as temporary aids to development in this direction. Frequently there was a period of withdrawal after the first period of attraction to the opposite sex and before the individual fell seriously in love. This period of withdrawal, well described by one man as a time when he developed "a healthy contempt for girls," serves the useful purpose of giving the individual time to gain control of the newly awakened sex emotion.

It is obvious that new controls will be necessary after the appearance of such a powerful emotion. At an earlier period, the organization of the emotions may have been so complete and unified that control of any passing impulse was relatively easy; but the appearance of a new emotion like that of sex naturally upsets the balance previously attained, shatters the earlier organization, and makes it necessary for new controls to be developed.

In highly developed Western civilizations there is an increasing tendency for the second great life-adjustment—the finding of a mate—to be considerably delayed after the attainment of biological maturity. This increases the difficulties of control. To deny the naturalness of the appearance of sexual emotions hardly helps in the solution of the problem. Indeed, the ostrich-like policy of some educationists in regard to one of the most fundamental developments of adolescence is not only unintelligent but is positively dangerous.

The increased interest in the opposite sex is, of course, only one of many related changes ; and it is equally important that it should neither be ignored nor, on the other hand, taken out of its setting. The period which sees the rise of the sex interest is also characterized by the making of important friendships, a tendency to hero-worship, an intense loyalty to the school or college or other group with which the individual is associated, and a sympathy with those who are less fortunate in human society ; in short, by the appearance of new or intensified social emotions other than those of sex. This was clearly revealed in the answers to the questionnaire and is also substantiated by other observations. Teachers and youth leaders have frequently drawn attention to the growth of the team spirit during early adolescence. Compared with the preceding period, there is a notable advance in willingness to subordinate the self to the group. Team games are now really enjoyed, and the natural growth of independence from parental control is usually associated with an increased need for group activities and club life.

The researches of Professor Piaget, of Geneva—more particularly his investigations of the growth of the moral judgment of the child¹—are suggestive in this connection. By comparing games, such as marbles, as played by children of different ages, Piaget tried to discover what changes in practice and in the conceptions of the rules of the game succeeded one another. By the use of questions in regard to stories told and situations described which embodied moral problems in concrete form, he also investigated the development of the idea of justice with the growth of age and experience.

Piaget was able to show in regard to children's games that there is a natural development from the stage when

¹ J. Piaget : *The Moral Judgment of the Child*, 1932.

the rules are regarded as sacred and unchangeable to that when each rule is regarded as a contract between the players, which should be respected by each individual, but which it would have been permissible to alter by general agreement before the game started. This important development usually takes place at about 10 or 11, and synchronizes with a change in practice in the direction of a genuine observance of the rules. It is from the time that the rule of co-operation replaces the rule of constraint that it tends increasingly to become an effective moral law.

A similar kind of change was also indicated by the children's ideas of justice at different ages. Piaget therefore concluded that there is a natural transition from a morality based on authority and constraint to one based on understanding and mutual respect. The more primitive form, the morality of obedience, is not a stable system in the child, but tends, especially in early adolescence, to develop into a morality of co-operation, given the right environmental conditions.

Practice in co-operation in work and play, membership of a fratriarchal, rather than a patriarchal, society and experience of self-government are therefore not unimportant to the growing adolescent. They provide for the expression of his intensified social emotions, aid the transition from a morality of obedience to a higher morality of co-operation, and thus provide indirect training for the third great life-adjustment—the willing acceptance of the responsibilities of citizenship in a democracy.

In addition, in the majority of cases there are new religious experiences and intensified æsthetic emotions. Although only 8.5 per cent. of the students who answered the questionnaire claimed to have had real religious experiences in childhood, 61.5 per cent. believed that

during adolescence they either experienced "conversion" or such an intensification of religious feeling that some sort of new orientation to the spiritual universe became necessary. It is true that towards the end of the period many were assailed by doubts and became extremely critical of the emotionalism of the earlier period; but the alternation between the strong religious feeling of the first stage and the critical attitude of mind of the second appeared to effect some sort of consolidation or "settling down" of the whole character.

Closely related to this religious awakening is the new or heightened appreciation of Nature, Music, Art and Poetry. With only a single exception, all who answered the questions recorded some increase in appreciation of one of the arts during the period, an indication of the development of subtler æsthetic emotions. The great majority found a new delight in Nature: landscapes began to mean more to them; the beauty of natural objects to make a stronger appeal. Some for the first time pierced the screen of outward natural phenomena and felt "a presence that disturbed them with the joy of elevated thoughts."

The period of youth is recognized by most religious bodies as being the time for adjustment to the spiritual universe and for first membership of religious organizations. Starbuck's empirical study of the growth of religious experiences¹ in a large number of American Protestants led him to the view that conversion is a distinctly adolescent phenomenon, belonging almost exclusively to the years between 10 and 25. The peak years for girls were found by him to be 13, 16 and 18, and for boys 12, 16 and 19; though on the whole the girls tended to be slightly more precocious than the boys in regard to religious awakening.

¹ E. D. Starbuck: *The Psychology of Religion*, 1911.

In some cases the awakening is more exactly described as ethical and philosophical rather than religious. There is a deep-set urge to explore the meaning of life, to consider ultimate values and to adopt an appropriate ethical code. The body of beliefs, which have been received almost passively in childhood, are now subjected to the impact of the individual's own intellectual criticism and his own emotional needs ; and this system is accepted and modified, or totally rejected, according to the measure in which it synthesizes the individual's own experiences. This searching for, and finding of, a philosophy of life constitutes the fourth major adjustment, characteristic of adolescence.

The full significance of the emotional changes of adolescence only becomes apparent when they are viewed in the light of recent discoveries concerning the foundations of character. The work of Ribot, McDougall and Shand has now resulted in the general acceptance among psychologists of the theory that the roots of a man's character lie in his feelings, or, more strictly, in his emotional dispositions. It is, of course, true that his beliefs and thoughts, his actions and habits, play their part in its formation ; but deepest down and most central of all are his sentiments, his tendencies to feel certain emotions towards certain objects under certain conditions.

In essence this is the view of character that was held by St. Paul.

" Though I have the gift of prophecy, and understand all mysteries, and all knowledge ; and though I have all faith so that I could remove mountains, and have not charity, I am nothing."

Translating this paragraph into modern psychological terminology, it might run :

Though my knowledge is complete, and all my cogni-

tions and beliefs are true, though I see all the universe in its proper proportions, yet if my feelings are not what they should be, my character has no absolute worth.

“ And though I bestow all my goods to feed the poor, and though I give my body to be burned, and have not charity, it profiteth me nothing.”

Again paraphrasing into modern psychological terms :

Though my actions are all that could be desired, and my habits are perfect, yet if they do not issue from right feelings, my character has no absolute worth.

Putting these two statements together, there is implied a general view of the nature of the foundations of character. A man's beliefs and actions may play their part in its formation ; but most central of all, most at the root, lie his feelings. If charity is his master-sentiment, all is well with his character ; if it is not, there is a canker at the root, which eventually will affect the other aspects of experience which are less fundamental.

If this view of the foundations of character be true, then the emotional changes natural to adolescence constitute a unique opportunity for character training. The rise of the sexual and social emotions delivers the individual, at least momentarily, from the egoism of childhood. The intensification of the æsthetic and religious emotions makes him more fully aware than ever before of the other spiritual forces that are at work in the universe. The call of the Infinite is more compelling and more insistent. The balance between the existing emotional systems is disturbed, and, in most cases, the subsequent reorientation is so fundamental that it constitutes in a very real sense the re-birth of the personality.

Associated with these emotional developments are the beginnings of four major life-adjustments—first, the

finding of a vocation and of independence ; second, the finding of a mate and the founding of a family ; third, the finding of a place in the community and the accepting of the responsibilities of citizenship ; and fourth, the finding of a philosophy of life and the adopting of an ethical code.

NOTES ON FURTHER READING

Dr. J. W. Slaughter's short study entitled *The Adolescent* (Allen & Unwin, 1911) gives a clear idea of the main changes characteristic of the period of youth. Dr. G. S. Hall's long-continued investigations described in his classic work entitled *Adolescence* (Appleton, 2 vols., 1904) are the chief source of the data on which Dr. Slaughter's rough generalizations rest. Dr. Hall's first volume deals mainly with the Pathology of Adolescence ; but his second volume, and particularly the chapters on " Adolescent Love " (Chapter 11), " Adolescent Feelings towards Nature " (Chapter 12), " Social Instincts and Institutions " (Chapter 15) and " Intellectual Developments and Education " (Chapter 16) have a more direct bearing on the education of normal adolescents.

Dr. Leta Stetter Hollingworth's book, *The Psychology of the Adolescent* (1929), is a valuable contribution, both in method and content, to an increased understanding of the period of adolescence.

Mr. A. F. Shand's great work entitled *The Foundations of Character* (Macmillan, 1914), although it makes no mention of adolescence, enables its reader to understand the full significance of the period in the growth of sentiments, and therefore of character.

CHAPTER V

DIFFERENCES BETWEEN ADOLESCENTS

So far this book has been mainly concerned with the *general* features characteristic of the period of adolescence ; and the method adopted for their investigation has been largely statistical. Such a method is a useful, and indeed the only safe, means of approach for the study of the broad features of the period ; but it has certain obvious limitations. When the statistician adds people up into masses and percentages, and calculates, for example, that a certain percentage of adolescents develop an interest in the opposite sex during the period, his results certainly give some indication of what is usual and to be expected in the majority of cases ; but that which is most characteristic of a sub-group or of an individual case, and in which it differs from its neighbours, escapes his ken. He lets slip that which is most significant to educationists, namely the rich variety of the individuals constituting the statistical group. It is, therefore, necessary for his work to be supplemented by a consideration of the resemblances and differences between individuals, and for the method of statistical analysis to be combined with the comparison of groups and with the more synthetic studies of individuals.

A. PHYSICAL DIFFERENCES

There are differences in bodily organization, which profoundly affect development, of which account must be taken at all stages of education. If an individual is deficient in one or more of the special senses (for example, sight or hearing) his education presents a special problem, namely, that of training some other sense or senses to

function as a substitute for the missing one. In less extreme cases, where sense-organs function imperfectly, it is important that the defect should be discovered, and if possible remedied without delay, so that the individual does not lose valuable opportunities for learning and—equally important—does not lose confidence in his own powers. Apart from such physical defects, there are differences in physique—for example, in size, strength and type—which need to be considered in adjusting education to meet individual needs.

One feature characteristic of adolescence, namely, the maturing of sex, occurs at widely different ages. For example, according to recent investigations in the U.S.A., not only does the average age of the first menstruation of girls differ in different climatic regions but variations from the average are considerable in the same region. Thus the age of first menstruation of 236 girls attending one educational institution varied from 10 + to 17 +, 13 + being the peak year for the change.¹ It is not only the specialist in physical education who needs to be aware of such differences in physical maturity, but also the other mistresses, and especially the head of the school, responsible for the general well-being of the pupils.

B. MENTAL DIFFERENCES

General Intelligence.—One very useful line of evidence in regard to differences between individuals in native ability has been accumulating in recent years through the extensive use of mental tests. Tests of general intelligence have been devised which do not measure educational attainment but rather the ability to solve problems and make adjustments to new situations. For example, the Binet-Simon tests consist of a graded series

¹ F. K. Shuttleworth: *The Adolescent Period*, National Research Council, Washington, 1938.

of such problems which have been standardized by application to thousands of children of the various age-groups. The series thus standardized can be used to measure roughly the mental age of any individual; success in any one kind of test counting as two months where, as is usual, there are six tests for each year. If a ten-year-old boy is not only able to solve the problems appropriate to his *chronological* age but also scores successes in tests appropriate for older children, he may turn out to have a mental age of, say, 13. His intelligence quotient, or I.Q., which would be obtained by dividing his mental age (13) by his chronological age (10) and multiplying by 100, thus expressing the result on a percentage basis, would then work out at 130.

The extensive application of these and other tests of general intelligence in Britain, France and America has revealed a greater range of variations than might have been expected from the consideration of differences in educational attainments. Even if mentally defective children are excluded, intelligence quotients may vary from 60 or 70 to 150 or more. For example, while the majority of a large unselected group of twelve-year-old children will probably have a mental age of 12, there will be some with the sense of children of only 8, 9, 10 or 11 years of age, and there will be others whose intelligence will be equal to that of adolescents of 13, 14, 15 or even 16 years of age. Yet any of these may be adolescents, judged by physical and emotional developments, and may therefore be ready to be promoted from the primary to the secondary stage of education.

Surveys of the distribution of intelligence in large unselected groups of children have been successfully carried out, notably by Terman¹ in America, by Burt,²

¹ L. M. Terman : *The Measurement of Intelligence*, 1916.

² C. Burt : *Mental and Scholastic Tests*, 1921.

Richardson¹ and Thomson² in England, and by the Scottish Council for Research in Education.³ The results obtained from such surveys reveal the continuity, as well as the wide range, of variations. It is not a case of a few *types* of children—the clever, the normal and the dull—but of all degrees of general ability, without a break, from below 25 per cent. to above 150 per cent. It has been calculated that rather more than one-half cluster round the average, that is, have I.Q.'s between 90 and 110 per cent.; that rather less than one quarter have I.Q.'s below 90 per cent., and a similar proportion have I.Q.'s above 110 per cent.

It is surely obvious, from this consideration of variations in general intelligence alone, that secondary education cannot be of one uniform type. There must be a variety of provision either in the same school or in separate schools; fewer subjects for those with less ability, a broader range of subjects and syllabuses for those who have more ability.

The use of performance tests as well as linguistic tests of general intelligence has revealed another kind of difference. The Binet-Simon, Terman and Northumberland tests are largely linguistic. The problems to be solved are put to the individual in words, and usually his solutions are also expressed in words. For example, a comprehension question, "What's the thing for you to do if a playmate hits you without meaning to do it?" is used by Terman for age 8; and the answers, whether satisfactory, like "Ask him to be more careful," or unsatisfactory, like "Tell my mamma," are in words. Similarly, vocabulary, definition, absurdity and many

¹ C. A. Richardson: "The Growth and Variability of Intelligence," monograph, *British Journal of Psychology*, 1933.

² G. H. Thomson: "The Northumberland Mental Tests," *British Journal of Psychology*, 1921.

³ *Intelligence of Scottish Children*, 1933.

reasoning tests are dependent on the use of language.¹ On the other hand, the Industrial Fatigue Research Board in England, following the lead given by such workers as Pintner, Yoakum and Yerkes, and Porteus in America, have used *performance* tests for measuring general intelligence.² These are problems that are solved by appropriate action and not by speech. For example, the putting together of the parts of a profile or manikin, the getting out of mazes of increasing difficulty and other similar puzzles, which constitute the series, can be solved without the use of words. It was discovered that in the majority of cases there was close correlation between the results obtained by the use of the Binet-Simon scale and the performance tests. There were, however, a few marked discrepancies in the measurements obtained by the use of both series of tests on children of 13 to 14 years of age. Two cases might be quoted from the Industrial Fatigue Research Board records: the first had an intelligence quotient of 121 on the Binet-Simon tests and 87 on the performance tests; the second only scored an intelligence quotient of 85 when tested with problems largely linguistic, but 112, well above the average, by the use of performance tests.³ Such discrepancies suggest that by the age of 13 or 14, special aptitudes and interests may have developed in some cases, and may therefore need to be considered in fitting the work of secondary schools to the needs of individuals.

Special Abilities.—There are certain special abilities which do not appear to correlate closely with general

¹ For the whole series of tests of which this is one, see L. M. Terman: *The Measurement of Intelligence*, 1916.

² F. Gaw: *Performance Tests of Intelligence*. Industrial Fatigue Research Board, Report No. 31, 1925.

³ *A Study of Vocational Guidance*. Industrial Fatigue Research Board, Report No. 33, 1926, p. 84.

intelligence. They may be found in high degree with almost any level of general intelligence. The chief of these are musical ability, representative drawing and mechanical ability. The importance of discovering and training such special abilities is surely obvious, for if there is one thing that a child can do supremely well or very much better than he can do anything else, its recognition may be absolutely necessary in encouraging self-respect and self-confidence, and may therefore be crucial to his general education. But the size of classes will need to be reduced and the staffing ratios improved before justice can be done to those individuals whose talents lie in special directions.

The differences that have so far been considered have all been in respect of *native* abilities. Nothing has been said of those differences in scholastic attainments which in the past have usually been the main criteria used for determining the suitability of individuals for secondary (grammar school) education. Of course, differences of attainment have to be taken into account in adjusting education to the needs of individuals, far more, for example, than the Norwood Committee implied in recommending a common curriculum for the first two years in all types of secondary schools. Differences in attainment may in certain cases be due to environmental conditions, for example, to neglect, bad teaching or absence from school through illness or from other causes. With individual attention, the backwardness resulting from such conditions may be overcome. In other cases, differences in attainment may be chiefly due to native differences in ability and temperament.

Emotional Differences.—In recent years many attempts have been made to measure temperamental qualities. For example, Professor June Downey¹ has invented tests

¹ J. Downey: *The Will-Temperament and its Testing*, 1923.

to measure ease and fluency of reaction, resistance to opposition and precision of reaction ; and by the joint use of these tests she claims to be able to assess differences in will-temperament. Such measurements are, however, only in the experimental stage of development, and at present they appear to be less reliable than the assessing of such qualities by interview and description. Already, however, it has been shown that qualities such as leadership do not correlate closely with intelligence. There is probably a *general* factor on the side of character which influences achievement just as much as, if not more than, the general factor in intellectual ability. If so, the efforts to measure it are likely to be of great practical importance in the future.

The old hypothesis of temperamental types has been revived, though in somewhat modified form, by some modern psychologists, notably by Jung.¹ He distinguishes two main groups—namely, extraverts and introverts—each with four sub-classes, varying in the emphasis given to thinking, feeling, sensation and intuition respectively. Although these eight types have so far hardly been proved to be sufficiently well marked to justify their consideration by educationists, the distinction between extraverts and introverts undoubtedly merits the attention of supporters of the principle of child-centred education.

Not only are there differences of temperament—that is, differences in the *innate* constitution of the feelings and conational drives of individuals—but variations also occur in the time and rate of subsequent emotional development. For example, among the University students who answered the questionnaire on adolescence,² there were some who confessed to feeling a great interest

¹ C. G. Jung : *Psychological Types*, tr. H. G. Baynes, 1938.

² See pp. 32-3.

in the opposite sex as early as 11 or 12, though the great majority did not develop in this direction until 15 or 16, and some not until 21 or even later. There were similar variations in social, æsthetic and religious developments. Thus, while an awakening to spiritual values was recorded in the majority of cases, this varied in date from one at 7 years, a few at 10, 11 and 12, a peak number of the women at 14 or 15 and of the men at 16 or 17, and a few considerably later.

The descriptions given also suggest a great range of variations in the intensity of the new emotional experiences. Some experienced only a vague interest in the opposite sex, whereas some fell violently in love. Some recorded a gradual awakening to spiritual values, while others experienced violent and apparently sudden religious conversion. Some passed through the period without signs of emotional stress, others experienced intense dejection and almost uncontrollable feelings of inferiority. There was suggestive evidence, not only of differences in general emotionality, but also of differences of emphasis on the various kinds of emotional experiences. In this connection it may be valuable to compare the answers given by a group of workers to the same questionnaire on adolescence which was answered by the students.¹ This group consisted of 50 men and 50 women, all of whom had left school before or at the age of 13, and some of whom had become half-time workers before that age. They were mainly employed as cotton operatives, warehousemen, grocers, factory workers, bakers and domestic servants: but some were married women engaged in the care of their homes and children. Their answers are tabulated in a form suitable for comparison with the results already considered.

¹ See pp 23-3.

TABLE II

COMPARISON OF WORKERS AND STUDENTS

Q. 1. Percentage who record as a favourite occupation or subject of study :		Workers	Students
Reading and/or literature		59	64 ¹
Games		11	33.5
Outdoor activities (e.g. walking, cycling, gardening, scouting, etc.)		22	26
Arts and Crafts (e.g. carpentry, needle-work, drawing, music, etc.)		61	35
Writing poetry		0	6
History (including politics)		10	24
Mathematics		0	31
Science		0	33
Geography		0	10
Philosophy or Theology		18	6.5
Q. 2. Percentage who record systematic day-dreams in adolescence		83	64
Q. 3. Percentage who record an increase in appreciation during adolescence in respect of :			
Nature		71	54.5
Music		40	59
Art		40	42.5
Poetry		29	63
Q. 5. Percentage who record religious experiences :			
(a) in childhood		9	8.5
(b) in adolescence		50	61.5
Q. 8. Percentage who record an interest in the opposite sex during adolescence		91	83.5
Q. 9. Percentage who record important friendships during adolescence		90	73.5
Q. 10. Percentage who record hero-worship during adolescence		80	50.5

¹ All of the 59 workers referred to general reading ; 48.5 per cent. of the students mentioned reading ; but 28.5 per cent. of these also mentioned literature as their favourite subject of study and are therefore included in the 44 per cent. assigned to literature on p. 34. The total for comparison is therefore entered as 64 per cent., i.e. 48.5 per cent. — 28.5 per cent. + 44 per cent.

		Workers	Students
Q. 11.	Percentage who were curious concerning the facts of life :		
	(a) in childhood	29	24
	(b) in adolescence	88	73

The main differences in intellectual interests indicated in the answers to question 1 were undoubtedly partly due to differences in opportunity. The absence of any mention of science and mathematics as favourite subjects of study in a group which showed by the answers to question 3 a very lively interest in Nature can only be explained in this way. The fact that only a small number learned to appreciate poetry, that fewer still studied history, and that such a relatively large proportion indulged in systematic day-dreams was almost certainly due to lack of opportunity. But the high proportion of workers who enjoyed such practical occupations as needle-work, playing the piano, mending clocks, gardening and poultry-keeping during adolescence (61 per cent. as compared with 35 per cent. of the students) suggests some difference which may go deeper and be native rather than acquired ; although even here it is not safe to generalize in the case of individuals whose opportunities for education were so limited, and whose talents may therefore have been deflected, if not destroyed.

The outstanding differences in the emotional experiences of the two groups are of more significance. A higher proportion of the workers than of the students recalled the development of the sex and social emotions (as indicated by the interest in the opposite sex, the friendships formed, and the tendency to hero-worship) during adolescence ; a lower proportion the intensification of æsthetic and religious emotions. The outward orientation of the emotional life would appear therefore to be directed towards other people in a greater number of

cases in the first group, and towards the universe as a whole in the second. Indeed, even some of those workers who stated that they had had real religious experiences and had been "converted" in adolescence showed, when they tried to describe the form of their conversion, that it was a social rather than a religious change; a realization of the brotherhood of man unrelated to a realization of the presence and purposes of God. Apart from these slight differences of proportion, the most striking thing about the two groups is the close resemblance between the emotional experiences of their members.

The examination of the answers of a few typical individual cases will not only reveal these general resemblances but will also indicate the uniqueness of the experience of each individual.

Case W. 2, age 39 years, man, whose parents were living during his adolescence, had two brothers and one sister; left school at 11, and acted as a warehouse worker in a cotton mill from 11 to 18 years of age: he was interested in history, but his chief hobby during adolescence was "the repairing of mechanical toys, model engines, watches and clocks" (Q. 1); he had no systematic day-dreams (Q. 2); had a deep appreciation of Nature but not much of music, art and poetry (Q. 3); did not experience "sudden conversion" but "had a gradual growth and a determination to live up to the light received" (Q. 5 and 6); he was interested in the opposite sex, "fell in love at 17 and married the same at 24" (Q. 8); made many friends (Q. 9); hero-worshipped a man much older than himself, a noted swimmer (Q. 10); was not interested concerning the facts of life during childhood, but became curious during adolescence; and because of his interest in Nature acquired some books on biology, anatomy and physiology from which, in his view "fortunately," he gained his knowledge (Q. 11).

This is a case of harmonious development, a general intensification of experience in the usual channels, and a successful and easy *outward* orientation of the feeling life to a wife, society and the universe as a whole. The new accession of life-energy was well distributed, as is shown both by the variety of the emotional developments and also by the absence of systematic day-dreams. The changes might be represented diagrammatically as illustrated below (Diagram 1).

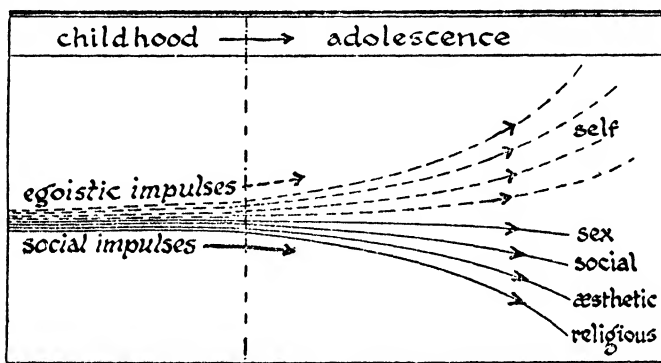


DIAGRAM 1.

Case M. 21, age 26 years, woman, whose parents were living, had three brothers and one sister; attended a girls' secondary school and a University. Her favourite occupation during adolescence was reading (Q. 1); she had systematic day-dreams as described in the following words: "During adolescence I always imagined myself the mother of a family. These imaginary children were never babies but always boys and girls of from 10 to 15 years of age, and much in need of my help. There were quite definite types—one was a strong athletic boy (I knew him quite well): another a dreamy imaginative boy: another very naughty and two girls. The father was always a vague person and different from time to

time. The dreams ceased when I was 19 or 20 or perhaps later" (Q. 2); she had little intensification of æsthetic experience (Q. 3); but during adolescence "religion became a very real thing and helped in many ways" (Q. 5 and 6); she did not fall in love (Q. 8); and did not make friendships (Q. 9). She left questions 10 and 11 unanswered.

This is a case in which there appears to be a blocking of certain of the channels in which the new energy of W. 2 was able to flow. It is here represented for purposes of comparison in Diagram 2. The absence of

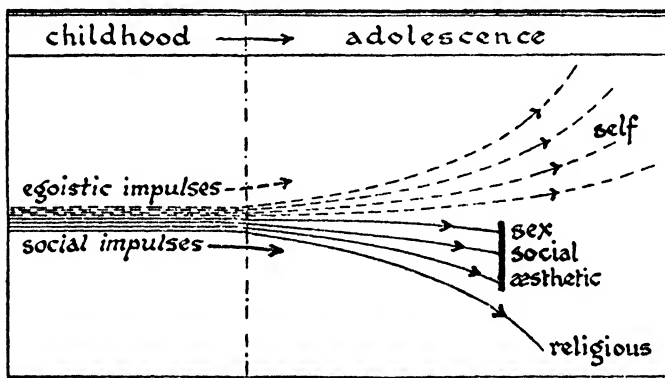


DIAGRAM 2.

æsthetic developments and of overt interest in the opposite sex might conceivably be consistent with the absence of the corresponding impulses, and not their blocking: but the nature and persistency of the day-dream recorded clearly proves that the sex and social impulses were actually operative although not openly expressed. An answer to question 11 would probably have thrown light on the nature of the blocking of these channels; but the unanswered question is not without significance, and provides additional evidence of diffi-

culties in facing the realities of life in regard to sex. It should, however, be noticed that some sort of balance was preserved between the two chief classes of impulses, namely, those directed *towards* and *away* from the self, religion being described by the writer as "helping in many ways."

Case C. 21, age 21 years, woman, whose parents were living, had one sister and three brothers; attended a mixed secondary school and a University College. Her favourite occupations during adolescence were reading novels, going for lonely walks and playing the piano (Q. 1); she had systematic day-dreams of two kinds, the first of literary and academic success and the second of courtship and marriage with an ideal man (Q. 2); she had a much deeper appreciation of Nature than in childhood and enjoyed being alone with it; she also developed a love of poetry (Q. 3); she had no real religious experiences (Q. 5); she fell in love with two or three masters in school between the ages of 14 and 17 (Q. 8); made many friends (Q. 9); but did not hero-worship anyone of her own sex (Q. 10). During adolescence she was very curious concerning the facts of life, her curiosity being aroused "largely through conversations at school" (Q. 11).

The significance of the absence of religious experiences in this case can only be deduced by viewing it in its complete setting. The sexual, social and æsthetic emotions seem well developed, and there is a deep enjoyment of Nature which might be a compensation for the absence of real religious experience. But the lonely walks and the alternating day-dreams suggest some conflict between ambitious (or egoistic) impulses on the one hand, and social (including sexual) impulses on the other. Viewing the answers synthetically (Diagram 3), it seems then not improbable that this conflict, by using up energy which

otherwise might have flowed along other channels, caused the slight maladjustment indicated by the student herself in the following words: "It was a source of trouble to me during adolescence that these (religious) matters should not have more effect upon me. It still worries me."

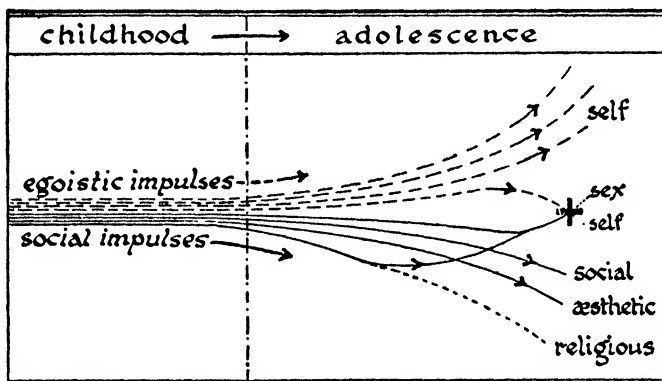


DIAGRAM 3.

Case M. 1, age 42, man, whose parents were living, had no brothers or sisters; had been at a boys' public school and a University. He answered the question concerning day-dreams in the following words: "I used to imagine myself in situations, but my imaginings were more an effort to imagine myself as out of situations into which circumstances were pushing me. I never for one hour *lived* the life that everyone supposed I was living but I 'went through the motions.' It suited my purpose rather well as it threw people off the real scent—at least I supposed it did." He recorded negative answers to questions 3, 5, 8, 9 and 10, and in amplification of his negative answer in regard to sex interests made the illuminating remark, "I always had a kind of conflict between 'God is love' and 'falling in love.'" He stated

that he seemed to have known about the facts of life "for ever."

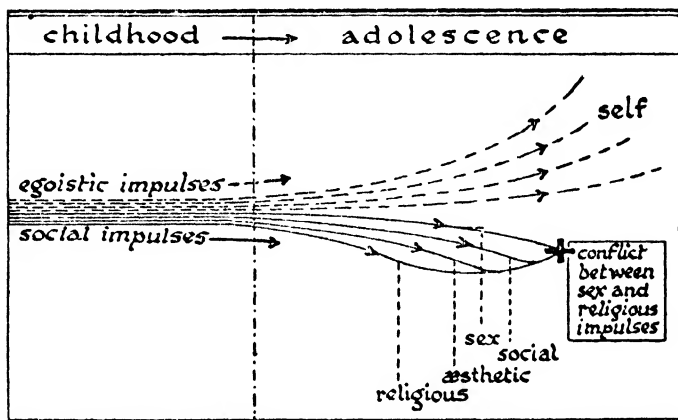


DIAGRAM 4.

This case is undoubtedly one where, owing to some shock or repressive influence, there was considerable difficulty in development during adolescence. The "double life" lived is a clear indication of serious conflict and maladjustment; and the absence of sexual, social, æsthetic and religious developments must be regarded as a retardation. It is interesting to notice that the most serious difficulty in emotional development found among the 300 cases occurs in an individual who was the only child of his parents.

The majority of the cases that were used for compiling the statistical evidence were of the first type in their main features (diagram 1); but a number, like M. 21 and C. 21, had slight maladjustments whose probable origin could be deduced by considering the answers synthetically. In only a very few cases was the difficulty of development of anything like the same magnitude as

that indicated in the case of M. 1 (diagram 4). It is therefore justifiable to regard the appearance or intensification of the sexual, social, æsthetic and religious emotions as natural to the period of adolescence, and to interpret the exceptions as cases of difficulty or partial failure of development. This is the fundamental generalization which, together with the important fact of variations in intellectual ability, needs to be borne in mind in any schemes for the improvement of secondary education.

NOTES ON FURTHER READING

Individual variations in intelligence are considered explicitly by Professor Terman in Chapters 5 and 6 of his book, *The Measurement of Intelligence* (Harrap, 1919), and by Professor Cyril Burt in Memorandum II of his *Mental and Scholastic Tests* (King, 1922). Professor Thorndike's treatment of individual variations in *Educational Psychology* (New York, Teachers' College, Columbia University, 1910-13) is not limited to differences in intelligence but includes the consideration of other traits (see Chapters 8, 9, 10 and 11).

Professor June Downey describes the methods used by her for measuring temperament and the results obtained therefrom in her book, *The Will-Temperament and its Testing* (Harrap, 1923). In an article in the *British Journal of Psychology*, 1929, Mr. P. E. Vernon criticizes such objective tests of temperament and emphasizes the necessity for a qualitative method of direct observation of temperament.

CHAPTER VI

RESEMBLANCES AND DIFFERENCES BETWEEN THE SEXES

BEFORE attempting to deal with the practical problems connected with the reorganization of adolescent education, another line of scientific evidence must be considered, namely, that relating to the resemblances and differences between the sexes. Many dogmatic statements about this perennially interesting topic have been made without any foundations ; and the main difficulty in the way of arriving at the truth is that most observers are prejudiced one way or the other. Only some sexless angelic being could be expected to record the behaviour of the two sexes with that disinterestedness necessary for a fair judgment. The nearest approach to that detachment is undoubtedly attained by scientists using experiments under controlled conditions, and having therefore objective standards of comparison.

A. PHYSICAL RESEMBLANCES AND DIFFERENCES

There is not much difficulty in obtaining data for a fair comparison of the physical changes characteristic of the two sexes in adolescence. It is generally agreed that there is a marked acceleration in growth in both, but that this spurt occurs somewhat earlier, on an average, in the case of girls than in the case of boys. There is a parallel, though differentiated, development of sex characters which profoundly affects almost all the physiological processes and leads to a sharp contrast between the blood-analyses of boys and girls *after* the change. There is an earlier beginning, a greater rapidity and a shorter

duration in the average growth of the girl as compared with the boy, which results eventually in his greater size and muscular strength. There is also a greater liability to fatigue and to slight nervous disorders during, roughly, the first half of adolescence in the case of girls—a fact of very great importance in the consideration of the problem of the differentiation of the secondary school course for boys and girls.¹

B. MENTAL RESEMBLANCES AND DIFFERENCES

The comparison of the mental characteristics of the two sexes is more difficult ; and in order to obtain a disinterested view it seems to be necessary to eliminate all opinions where there may be a sex bias, and to concentrate on facts discovered by experiments which are so conducted that the sex of the experimenter could not affect the results. Fortunately, there have been a number of investigations of this kind, where the same tests or experiments have been tried on the two sexes under the same conditions.

General Intelligence and Special Abilities.—The extensive use of intelligence tests, originally designed for other purposes, has provided data for the comparison of the *average* intelligence of boys and girls. Terman tested nearly a thousand children (457 boys and 448 girls) in America by the use of the Stanford revision of the Binet-Simon scale ; and found, on taking averages, that the girls of each age-group from 5 to 13, with the single exception of 10, had a slight superiority over the boys² ; so slight, however, that for practical purposes it would seem to be negligible. He concludes that “ as far as the evidence of mental tests can be trusted, the *average*

¹ Report on *Differentiation of Curricula between the Sexes in Secondary Schools*, H.M.S.O., 1922, especially Appendix V by Dr. J. G. Adami.

² L. M. Terman : *The Measurement of Intelligence*, 1919, fig. 3, p. 69.

intelligence of women and girls is as high as that of men or boys.”¹ In England Dr. Cyril Burt came to the same conclusions after employing the Binet-Simon tests on some three thousand school children, as will be seen from the following tabulated results taken from his book entitled *Mental and Scholastic Tests*.

Chronological Age	Average Mental Age (Boys)	Average Mental Age (Girls)
3	3·2	3·8
4	4·5	4·7
5	5·3	5·7
6	6·2	6·8
7	7·3	7·8
8	8·4	8·7
9	9·2	9·6
10	10·7	10·4
11	11·4	11·5
12	12·0	12·4
13	12·9	13·3
14	13·5	14·2

Since the average mental age of girls of each chronological age-group from 3 to 14, with the single exception of 10, is slightly higher than that of the corresponding boys, Dr. Burt concludes that “the feminine sex, if any, is the superior sex in the Binet tests.”²

Although there appears to be very little difference between the *average* general intelligence as measured by these tests, both Terman and Burt noticed interesting differences in the method of scoring by boys and girls. The tests used are of many kinds, and although the total score made on the series was almost the same, the boys on an average did better in the definition and similarity tests, and also in the arithmetical reasoning tests, whereas the girls compensated by their better scores in vocabulary

¹ L. M. Terman: *The Measurement of Intelligence*, 1919, p. 68.

² C. Burt: *Mental and Scholastic Tests*, 1921, p. 193.

and æsthetic judgment tests, and also in comprehension questions. For example, one of the six tests for age 14 was the following definition test : " There are three main differences between a president and a king ; what are they ? " The three differences relate to tenure, manner of accession and power : and a response is regarded as successful if any two of these are given, such as " The king is king for life, the president only for a term of years " ; " The king is king by birth, the president by election." A great number of fourteen-year-olds, and indeed of adults, fail in this test ; and show by their answers that, although they may have formed *images* of kings and presidents, they have not abstracted the essential idea behind the contrast. For example, replies such as " A king wears a crown, a president does not " ; " A king dresses up more " ; and the unconsciously humorous one of the poor speller, " The king sits upon a thorn," would, on this account, be regarded as unsatisfactory. Although there are always some girls who score as well as the best boys in such definition tests, Terman found that the average score of the boys was better than that of the girls. The girls, however, made up for their deficiencies in this and the similarity and arithmetical reasoning tests by their greater success in vocabulary tests, æsthetic judgments and problems requiring what might be described as social tact for their solution. For example, " What ought you to say when someone asks your opinion about a person you don't know well ? " and " What ought you to do before undertaking (beginning) something very important ? " are two of the three comprehension questions assigned to age 10 ; and on an average the girls were more successful than the boys in their responses to such questions.

These differences are not unexpected. They agree with the widespread view that, while boys and men are

on an average better in reasoning and mathematics, girls and women excel in command of language and in social tact. They suggest, however, that the *linguistic* nature of the Binet-Simon tests may have given an unfair advantage to the girls, who on the whole appear to have better vocabularies than the boys. Dr. M. McFarlane's measurement of the constructional abilities of boys and girls in the London schools reinforces this objection. She found that considerably more boys than girls succeeded, under controlled conditions, in making a toy wheelbarrow out of the parts provided. This test might conceivably have been unfair to the girls, fewer of whom would have had much working acquaintance with a wheelbarrow: but in a second test—the construction of a doll's cradle—which was in line with the interests of the majority of the girls, the boys still proved themselves to be slightly superior.¹

It is, therefore, perhaps wise in comparing the average general intelligence of boys and girls to use performance tests as well as the Binet-Simon series. The records obtained by the Industrial Fatigue Research Board show that, when performance tests are used, the boys on an average have a slight advantage over the girls.² The general conclusion must, therefore, be drawn from the use of both kinds of tests that there is, on an average, practical equality between boys and girls of the same age in regard to general intelligence.

What explanation is there then of the fact, obvious to any fair-minded observer, that there are proportionately more distinguished and creative minds among men than among women? The researches of Dr. Helen Thompson on students of Chicago University throw some light on this question, though they do not supply the whole

¹ M. McFarlane: *A Study of Practical Ability*, 1925.

² Industrial Fatigue Research Board, Report No. 33, 1926, pp. 26-7.

explanation. Dr. Thompson tested equal numbers of men and women students for sensory acuity, motor control and higher thought processes: and she found that, although the women were on an average better in touch, taste and sense of colour, and the men were superior in motor control, there was no difference between the *average* scores of the men and the women in respect to the higher thought processes. The range of variations was the same; but there was one very significant difference, namely, in the distribution of the cases round the average. There were proportionately more men who scored very high marks, and also there were proportionately more whose scores were very low.¹ The men, then, tended to go to the two extremes; the women to cluster round the average.

A similar kind of generalization in respect of boys and girls appears to be justified from the results of the Scottish Survey of the general intelligence of the 11 to 12 age-group. Whereas in the tests given, 4.25 per cent. of the boys had very superior scores (more than 59 marks), only 3.3 per cent. of the girls were placed in the same category. On the other hand, 8.07 per cent. of the boys had very low scores (under 10 marks), whereas only 6.36 per cent. of the girls were found in this class.²

The common view that there are proportionately more men and boys of very high intelligence than women and girls is probably true, but it appears to be only half of the truth, the other half being that there are also proportionately more cases of very marked intellectual weakness. More geniuses, coupled with more idiots and mentally defectives, make the *average* the same as for the other sex.

The general conclusion that can be provisionally drawn is, then, that individual differences in intellectual ability

¹ H. Thompson: *The Mental Traits of Sex*, 1903.

² *Intelligence of Scottish Children*, 1933.

within each sex far outweigh the differences between the two sexes. Consequently, while the case for greater variety of educational provision for both boys and girls is clearly proved, the case for sharp differentiation of the curricula for the two sexes is not substantiated by the known facts of variation in intellectual ability.

Emotional Resemblances and Differences.—It is generally agreed that both sexes inherit the same instincts and the same tendencies to feel such simple emotions as fear, anger, positive and negative self-feeling, and affection. The more complex emotions, such as admiration, reverence and the æsthetic and religious emotions are also within the range of the experiences of both sexes ; and the same kind of development of the emotional life occurs in both cases during adolescence, although it occurs, on an average, earlier in the case of girls than boys.

It is far more difficult to investigate emotional differences between the sexes than to compare intellectual ability ; for although tests of temperament are beginning to be used both in England and in America,¹ they are so undeveloped at present that their use must remain tentative for some time. Meanwhile, indirect and less scientific lines of evidence must be utilized, and the conclusions drawn from them be regarded as provisional.

Professor Cyril Burt's work on *The Young Delinquent* provides one such indirect line of evidence. Dr. Burt investigated many cases of juvenile delinquency, and classified the misdemeanours committed according to the instinctive tendencies (and emotions) to which they appeared to be related. He found that there were relatively more delinquent boys than girls ; that a higher

¹ M. Collins : "Character and Temperament Tests," *The British Journal of Psychology*, October 1925.

D. W. Oates : "An Experimental Study of Temperament," *The British Journal of Psychology*, July 1928.

proportion of offences such as burglary, excessive fighting, cruelty to animals, stealing and wandering occurred amongst the boys; and a higher proportion of sex offences, lying and attempted suicide among the girls.¹ The boys' misdemeanours might be regarded as arising from failure to control the instincts of pugnacity, self-assertion and acquisitiveness, that is, the more aggressive and egoistic impulses; and the girls' as arising from a similar failure to control the sex impulse, self-subjection and other instincts that are in the social group. This contrast throws light on the emotions which most easily get out of control in the two sexes, and therefore provides indirect evidence of a difference of strength in the egoistic and social emotions of the two sexes. The difference indicated is of course only slight and relative, both sexes having the same fundamental instincts and their corresponding emotions.

The number and kinds of books read by boys and girls have been investigated by A. M. Jordan² in the U.S.A. and by A. J. Jenkinson³ in this country and reveal interesting sex differences. On the whole, girls between 11 and 15 + seem to read more than boys of corresponding age. Boys tend to read more tales of adventure and detective stories; and girls more tales of school and home life and romances. According to Jenkinson, girls of 14 + and 15 + are nearer to adult literary tastes than boys of the same age—a further indication of the earlier emotional development of the girls.

Another line of evidence that is of interest is contained in the diaries and literary production of adolescents collected and studied by Oskar Kupky.⁴ The religious

¹ C. Burt: *The Young Delinquent*, 1925, Table I, pp. 15-16.

² A. M. Jordan: *Children's Interests in Reading*, Teachers' College Contributions to Education, 1921.

³ A. J. Jenkinson: *What Do Boys and Girls Read?* 1940.

⁴ O. Kupky: *The Religious Development of Adolescents*, tr. Trow, 1928.

poems of the girls are marked by an attitude of prayer and dependence : there is no parallel among them to the attitude of titanic aggression found among some of the boys and expressed, for example, in the following poem, written by a lad of 18 :

Come, let us live
Free of the Godhood,
Free of religion.
We are almighty.
We shall live always
In spite of the Lord God.

The comparison of the answers of men and women to some of the questions on adolescence previously considered also throws light on the emotional differences between the sexes. The tabulated results are those obtained from the same 200 students (100 men and 100 women) and 100 workers (50 men and 50 women), the latter being placed on a percentage basis for ease in comparison.

TABLE III
COMPARISON OF MEN AND WOMEN

		Group 1 (Students)		Group 2 (Workers)	
		Men	Women	Men	Women
Q. 2.	Percentage who had systematic day-dreams in adolescence	50	78	84	82
Q. 3.	Percentage who record an increase in appreciation of :				
	Nature	52	57	80	62
	Music	52	66	40	40
	Art	36	49	60	20
	Poetry	55	71	40	18
Q. 5.	Percentage who record having real religious experiences :				
	(a) in childhood	3	14	8	10
	(b) in adolescence	62	61	18	82

		Group 1 (Students)		Group 2 (Workers)	
		Men	Women	Men	Women
Q. 8.	Percentage who record an interest in the opposite sex during adolescence	94	73	84	98
Q. 9.	Percentage who record important friendships during adolescence	75	72	82	98
Q. 10.	Percentage who record hero-worship during adolescence	47	54	80	80
Q. 11.	Percentage who were curious concerning facts of life :				
	(a) during childhood	23	25	14	44
	(b) during adolescence	69	77	100	76

It will be seen from these figures that in the second group (of workers) there are proportionately more women than men who were interested in the opposite sex during adolescence (98 as compared with 84), and who acknowledged that they were curious concerning the facts of life at an early age, that is, during childhood. There are also proportionately more who had real religious experiences during adolescence (82 as compared with 18), but fewer who record an intensification of the æsthetic emotions. On the whole, however, the results are in agreement with the conclusion reached by the indirect evidence connected with juvenile delinquency, namely, that more women and girls than men and boys tend to emphasize emotions that are directed *away* from the self.

In the first group (of students) there are additional complications. There are considerably more women than men who record an intensification in their enjoyment of poetry, music, art and Nature, but there are fewer who state that they were interested in the opposite sex (73 as compared with 94). This last fact might conceivably be due to a greater secretiveness among women than men in regard to such matters ; but in that case a similar

contrast should have occurred between the men and women workers. Its significance can only be properly interpreted when it is remembered that more of the women than the men in group 1 indulged in systematic day-dreams (78 as compared with 50) ; and that many of these day-dreams, like that recorded in case M. 21,¹ indicated a sex interest which, through lack of opportunity or from some other cause, could not be openly expressed. It is, therefore, probable that in the second group, as in the first, there is a greater emphasis on the emotions that are directed *away* from the self among the women than among the men.

The great difference in the proportion of men and women who had systematic day-dreams in group 1 and the absence of a corresponding difference in group 2 is highly significant. Day-dreams are very frequently compensations, and indirectly express impulses that are denied expression by the actual environment surrounding the individual. The boy who constantly imagines himself making a century at cricket and yet in actual life frequently " goes out for a duck " compensates in thought for his failure in reality. The high proportion of both men and women *workers* who had resort to day-dreams during adolescence indicates that the conditions under which they were compelled to live left unsatisfied some of their newly reinforced instincts. For example, one lad of unusually high intelligence (W. 3), at work in a cotton mill from the age of 12, continually imagined himself the Prime Minister of England. His growing powers and ambitious impulses could not find scope in his actual occupation, and he compensated in the world of thought for his lack of opportunities. The contrast between the 84 per cent. of the men in group 2 and the 50 per cent. of the men in group 1, who made use of these

¹ See p. 60.

compensatory day-dreams, indicates in a striking form the magnitude of the difficulties in development that must have arisen among those who had to leave school at an early age through lack of educational opportunities.

The high proportion of University women (78 as compared with 50 men) who had a similar tendency to day-dreams shows that there is a greater liability to conflict and slight maladjustments among highly intelligent girls than highly intelligent boys. The ambitious impulses of a man are reinforced by his plans for marriage and family life ; whereas a woman usually has to make a choice between sacrificing her own ambitions in attaining full social life and concentrating on professional work to the exclusion of marriage. The shadow of this choice is thrown across her even during adolescence, and in a number of cases there are signs of definite conflict between the egoistic and social impulses, both of which receive new energy during this period. This greater liability to conflict is perhaps the chief difference between highly gifted women and men of a corresponding intellectual calibre. It may largely explain the smaller proportion of women who attain intellectual and professional distinction, notwithstanding the fact that their ability, as measured by general intelligence tests, does not seem to be lower than that of men.

The emotional development of the girl is, then, in certain respects more difficult than that of the boy. To him there is a fairly obvious path open, to express his powers, attain economic freedom and full social maturity. To her the course is much less plain, and may only become clear after the resolution of many conflicts. She is frequently helped through her difficulties in growing up by her love of her father, whose influence on her emotional development at this stage tends to be greater than that of her mother. The case is different with the

adolescent boy whose strongly reinforced egoistic impulses are much more likely to bring him into conflict with his father. While his mother tends to err on the side of spoiling him, his father needs to be constantly on his guard against being unduly harsh and unsympathetic. One of the most poignant and illuminating comments on the difficulties of development which arise out of unsympathetic family relationships during adolescence is undoubtedly that contained in Edmund Gosse's autobiography entitled *Father and Son*.¹ It is a record of a struggle between two temperaments, and illustrates how personal relations between father and son may be poisoned by the unduly repressive influence of the adult. It shows what difficulties may arise through misunderstanding by a well-meaning parent, and proves the necessity for education for the responsibilities of parenthood. Undoubtedly the greatest wisdom and psychological insight are needed by parents, if they are to avoid both the evil effects of undue influence and also of what, to the adolescent, appears to be a triangular emotional relationship.

The part played by the parents in determining the emotional development of their children during adolescence is so subtle and far-reaching that to regard the teacher and the school as the chief influences at work in the formation of character is palpably absurd. Whatever may be true of the education of the intellect, the home must ever remain the premier training-ground of the emotions; and in adolescence, when emotional changes may threaten to overwhelm a boy or a girl, the closest co-operation between parents and teachers will be necessary if the appropriate help is to be given. This fundamental truth must be remembered when the problem of the discipline suitable to this period comes under consideration.

¹ Published anonymously, 1907, and later under the author's name.

NOTES ON FURTHER READING

Appendix V to the Report on *Differentiation of the Curriculum for Boys and Girls respectively in Secondary Schools* (H.M.S.O., 1923) is a balanced statement by Dr. J. G. Adami of the physical differences between the sexes during adolescence. Both Burt and Terman deal judiciously with the resemblances and differences between the sexes in respect of intelligence (see references in the text), and Thorndike considers the general problem of the influence of sex on mental characters in Chapter III of his *Educational Psychology* (New York, Teachers' College, Columbia University, 1910-13). Dr. H. Crichton Miller has two useful chapters (IV and V) on the emotional development of the boy and the girl, respectively, in his book *The New Psychology and the Teacher* (Jarrolds, 1921). Much experimental work has been done in the U.S.A. on sex differences, and the results have been well summed up in *A Handbook of Child Psychology* (Clark University Press, 1933), Chapter XV.

See also O. A. Wheeler, "Variations in the Emotional Development of Normal Adolescents" (*British Journal of Educational Psychology*, 1931, Vol. I, pp. 1-12), for a fuller discussion of the emotional differences between the sexes.

CHAPTER VII

SOME PATHOLOGICAL CASES. THE JUVENILE DELINQUENT

ADOLESCENCE is comparable to infancy in respect of the rate of growth and the resulting instability of the individual. On the physical side there is an increased liability to certain disorders and asymmetries: on the emotional side there tend to be similar difficulties of adjustment, due also to the relative suddenness of the changes which occur during the period. In the majority of cases, the processes of sex-awakening and of adjustment to the social and spiritual universes take place relatively easily: there is a period of over-emotionalism followed by a period of withdrawal, and then the new controls appear to function usefully and satisfactorily. Indeed, it is a mistake to suppose that there need be violent upheavals and intense unhappiness on the part of each adolescent; but there will usually be instability, changeableness and a certain kind of waywardness during the period. These are obviously only signs of growth.

In a few cases, however, there will be more serious difficulties of adjustment: and there may even be anti-social behaviour of such a kind as to bring the adolescent into conflict with the laws of adult society. Juvenile delinquents, who thus become chargeable for offences against the law, are rightly beginning to be regarded as needing curative treatment rather than punishment, re-education rather than reprimand. The psychological study of these delinquents is not only important for the development of more humane and more intelligent methods of treatment of such offenders, but also for the light which it frequently throws on lesser, but more usual,

maladjustments. For example, Dr. Cyril Burt's masterly analysis of the causes and kinds of juvenile delinquency¹ is not only of supreme importance to all who have to deal with delinquents; but it is also illuminating to parents and teachers, who may at any moment be called upon to deal with lesser difficulties of adjustment in home or school.

Dr. Burt submitted to exhaustive examination some 200 cases of juvenile delinquency. He recorded the family conditions and history; the individual's physical condition and history; his intelligence, special abilities and disabilities, and school attainments; his temperament and character and the history of the delinquencies committed. In many cases the results of psycho-analysis or other methods of treatment are also indicated in some detail. Dr. Burt's main conclusion, arrived at from the consideration of both child and adolescent delinquents, suggests a very profitable angle of approach for the understanding of pathological adolescents. He expresses the view that practically all the so-called "crimes," that he was called upon to investigate, were due to failure to control one or more of the primitive appetites or instincts. "The commoner delinquencies committed by the young," he says, "consist essentially, in almost every case, either of the hereditary reactions which constitute the universal human instincts, or else of slightly modified reactions elaborated out of, but still evidently springing from, these aboriginal modes of response."²

As might have been expected, these delinquencies occur most frequently during the period of greatest instability, more than one-half of the cases investigated by Dr. Burt being between the ages of 12 and 15. The new accession of energy to the egoistic impulses, and the appearance or intensification of the sex appetite and the

¹ C. Burt: *The Young Delinquent*, 1925.

² *Ibid.*, p. 422.

social instincts will naturally mean that the controls previously acquired will no longer be adequate to their task ; and new controls must therefore be given time and opportunity to develop before the individual can be held to be a fully responsible member of society.

The most common difficulties of adjustment during adolescence seem to be of two main kinds : firstly, those due to overt failure to control some primitive impulse, possibly on account of its unusual strength ; and secondly, those due to a blocking of the new energy, to repression, and to a consequent arrest of development.

Slight difficulties of adjustment of the first kind are fairly common. The boy or girl given to flirting or to unnatural behaviour in the presence of the other sex is probably experiencing difficulty of control of the new sex interest. Imagine this difficulty increased a hundred-fold and the result would be a type of delinquent like Emmeline O. investigated by Dr. Burt.¹ At the age of 13 she was brought to him as being "beyond parental control." She belonged to an outwardly respectable family, but on investigation Dr. Burt discovered evidence of strong sex tendencies both on the mother's and on the father's side. According to the mother, although Emmeline was truthful and obedient in all other respects, she periodically absented herself from home for hours in the evening, and, according to rumour, spent her time in picking up male acquaintances, for choice, coloured men of an oriental race. In physical development she appeared to be about 16, and her mental age was 17 (I.Q. 131). In addition to possessing good general ability, she was specially gifted in singing and elocution.

Dr. Burt's treatment was based on the view that what was needed was not the negation, but opportunities to gain control, of the unusually strong sex impulse. He

¹ C. Burt : *The Young Delinquent*, 1925, pp. 429-32.

therefore advised that the girl should be allowed to join hockey and tennis clubs, to take part in amateur dramatics and other artistic pursuits, to make men friends in these activities and to bring them openly to her house. He also advocated that she should be encouraged to continue her general education and should be given full sex enlightenment by the family physician. This positive and sympathetic treatment seems to have been successful, for there was no dire catastrophe, and after nine years the girl was found to be a young actress of promise, the sole support of her widowed mother.

The second type of maladjustment is caused by the repression of an appetite or instinct. It does not follow that a primitive impulse ceases to exist when it is denied overt expression: it may continue to work in the subterranean passages of the unconscious mind, thereby influencing thought and conduct indirectly, and perhaps expressing itself symbolically in dreams and day-dreams. For example, the student (M. 21) whose case was considered earlier,¹ and who continually imagined herself married and the mother of a large family, did not actually fall in love during adolescence; but her day-dreams revealed the operation of the sex impulse, and perhaps provided for it a kind of safety valve during the period of transition. If her day-dreams had been so much more frequent and persistent that her adjustment to the real world had been jeopardized by them, they would have indicated a serious failure to solve in the open the conflict between the sex impulse and some other opposing impulse, and an avoidance of further conflict by the relegation of the sex impulse to the unconscious mind.

An actual delinquency investigated by Dr. Burt² arose

¹ See pp. 59-61.

² C. Burt: "The Dreams and Daydreams of a Delinquent Girl," *Journal of Experimental Pedagogy*, 1921 (I-IV).

in the case of Nellie Malone from just such a cause. Nellie came under Dr. Burt's observation when about 16 years of age, and is one of the cases most completely analysed by him. She was employed as a domestic servant, and, it was alleged, had repeatedly stolen articles, chiefly jewellery, from her mistress. She was said to lie freely and fantastically, not only about the thefts, but also about topics of no discernible importance to her. On analysis, it was discovered that from childhood she had indulged in a series of day-dreams, and that at the time of the thefts her favourite day-dream centred in a proposal of marriage from the Prince of Wales. It was when she was indulging in some such day-dream, in which the hero lavished gifts upon her, that she appropriated and decked herself in her mistress's jewellery.

Her home conditions were undoubtedly a contributory cause to her unhealthy emotional development. Her father, of whom as a child she was very fond, had disappeared ; and her mother's explanation of his disappearance had not been accepted by her, but had given rise to an intense dislike and jealousy of her mother. This thwarting of her love for her father just at the time when it might have mediated in the development and control of sex love, her growing hatred of her mother and her daily life as a domestic servant in an uncongenial environment were too much for her, and led her to take refuge in what might be described as a flight from reality. Her delinquencies must therefore be regarded as an indirect expression of thwarted emotional tendencies. This case is significant, not only as an example of the effects of repression, but also as an instance of the far-reaching influence of the family circle and the parents' relations to one another, on the emotional development of an unstable child.

The cases of Emmeline O. and Nellie Malone have been

chosen for purposes of comparison to show the difference between an overt failure to control, and a repression of, the same impulse. It would, however, be misleading to imply, even by illustrations, that the sex impulse is the only one in the control of which difficulties arise. Egoistic impulses may also be uncontrolled or repressed. The day-dreams recorded by the groups of students and workers previously considered were of two main kinds, those giving expression to egoistic or ambitious impulses of some kind, and those originating in sex and social impulses.¹ For example, M. 15 not only had romantic reveries in adolescence but also had a frequently recurring day-dream in which he imagined himself an officer in the navy, a very impressive figure in uniform, but "always home on leave." A day-dream of this nature probably has its origin in an unsatisfied instinct of self-assertion, and indicates one of the dangers of such pleasure-thinking, where it is always possible to escape the hard facts of reality and have things both ways, the individual in this case being in naval uniform and yet always home on leave.

One of the cases of delinquency investigated by Dr. Burt is an example of this tendency to escape from the problems of adjustment to the real world by expressing the egoistic impulses in an imagined life of adventure. Stanley Q. was a boy of 12, living in a comfortable suburban villa, who frequently played truant on Wimbledon Common and slept at night upon area steps. He stole buns and bananas from shops and stalls, and eventually extracted a five-pound note from his uncle's cash-box. When his theft was discovered, his mumbled explanation was, "I want to go away. I took it to get abroad." He was backward in school and his form-master thought him defective. His general intelligence

¹ See pp. 59-62, cases M. 21 and C. 21.

was above normal ; his mental age being measured as 13.5 by the Binet tests, and 13 by performance tests. This discrepancy between his ability and his educational attainments suggested that his mental energy was in some way being deflected from his school work : his dreamy look and his solitary wanderings also suggested that he was living some sort of double life. On long-continued investigation Dr. Burt eventually discovered that, hour by hour, instead of concentrating on his school work, he was revelling in a glorious never-ending day-dream in which he figured as a hero, a traveller and an explorer, like his namesake, Stanley. As a prop to his imaginative processes, he made the stall-holders, shop-keepers, policemen and his unsuspecting relatives play their parts as hostile savages to be raided and, if possible, outwitted by him as hero.

In this case, as in that of Nellie Malone, the family relationships played their part in the development of the maladjustment. The father and mother were quiet, elderly, stay-at-home people with little sense of adventure and little sympathy with a boy like Stanley. The father constantly held up the other two children as models of behaviour, and there were signs of a secret antagonism between father and son. In short, Stanley was a misfit in the family circle. When he was sent away from home to be coached by a clergyman, whose house was more like a farm than a vicarage, he made nearly five years' educational progress in less than three years ; and afterwards he settled down to be trained as a naval cadet. In this, as in so many other cases, correct diagnosis led to successful curative treatment.

Other investigators agree with Dr. Burt that of all environmental conditions tending to child delinquency the most powerful is the unsuitable home. For example, Dr. William Healy investigated 1,000 cases of delinquency

in Chicago and found that 498 came from homes from which one or both parents were missing, through death, divorce or desertion; and 311 from homes where at least one of the parents was frequently or occasionally intoxicated. Similarly, Carr-Saunders, Mannheim and Rhodes¹ concluded from a thorough statistical inquiry in this country that "the chance of a delinquent coming from a home with a disturbed home atmosphere is three or four times as great as the chance of a delinquent coming from a home with a normal atmosphere."

It is, of course, true that under the same home conditions one child may be delinquent and another, not far removed in age, may be normal. In collaboration with Brunner, Dr. Healy² compared in detail a number of pairs of twins and siblings of this kind, and found that the delinquent group showed the same range of I.Q.'s as the non-delinquent group. Where they differed was in respect to emotional stability. Thus 92 per cent. of the delinquent group showed symptoms of emotional disturbance, such as deep resentment against the father or mother, or strong feelings of insecurity or inferiority. This suggests that parents not only need to consider the general home conditions which favour the many-sided development of their children, but also to study the different needs of each individual. The methods of treatment that proved successful for one child may not suit his brother or sister: and there is need for the sympathetic understanding of each child in the family circle.

It will be generally agreed that within recent years there have been vast improvements in this country in the treatment of young offenders. The institution of

A. M. Carr-Saunders, H. Mannheim and E. C. Rhodes: *Young Offenders*, 1943.

² W. Healy and J. Brunner: *New Light on Delinquency*, 1936.

separate juvenile courts in 1908, the operation of the First Offenders' Act and subsequently of the Children and Young Persons' Act of 1933, the increasing use of probation officers, the more intelligent handling of the problem by at least some of the magistrates and the more enlightened methods of the approved schools and Borstal institutions are many-sided indications of progress in regard to the treatment of juvenile delinquents. But there are still many relics of an outworn tradition of retribution. For example, there are still cases where magistrates order flogging without consideration of the medical and psychological evidence concerning its probable effect on the offenders. There is also need for the better and more scientific training of probation officers and for their work and that of the teachers in approved schools to be more closely linked with the general educational system. If young delinquents are emotionally defective and in need of curative treatment, it is surely an anomaly that, while all other special schools concerned with defective children should be under the Ministry of Education, approved schools for delinquents should continue to be administered by the Home Office.

In that biting satire on modern civilized society, *Erewhon*, Samuel Butler described a State which treated physical disorder as we treat moral delinquency; and moral defects as we treat physical illnesses. "In that country," he writes, "if a man falls into ill-health, or catches any disorder, or fails bodily in any way before he is seventy years old, he is tried before a jury of his countrymen, and if convicted is held up to public scorn and sentenced more or less severely as the case may be. There are sub-divisions of illnesses into crimes and misdemeanours as with offences amongst ourselves—a man being punished very heavily for serious illness, while

failure of eyes or hearing in one over sixty-five, who has had good health hitherto, is dealt with by fine only, or imprisonment in default of payment. But if a man forges a cheque, or sets his house on fire, or robs with violence from the person, or does any other such things as are criminal in our own country, he is either taken to a hospital and most carefully tended at the public expense, or if he is in good circumstances, he lets it be known to all his friends that he is suffering from a severe fit of immorality, just as we do when we are ill, and they come and visit him with great solicitude, and inquire with interest how it all came about, what symptoms first showed themselves and so forth—questions which he will answer with perfect unreserve ; for bad conduct, though considered no less deplorable than illness with ourselves, and as unquestionably indicating something seriously wrong with the individual who misbehaves, is nevertheless held to be the result of either pre-natal or post-natal misfortune.”¹

Butler’s satire certainly makes one doubt the logic behind not only the Erewhonians’ differentiated treatment of moral and physical illness but our own reverse distinction. In any case, whatever may be true of adults, the scientific facts go to show that, at least in regard to children and adolescents, there is no such fundamental distinction between moral delinquency and physical illness. The visiting of the death penalty on Jacobi, a lad of just eighteen years of age who was obviously an “emotional defective,” was as irrational a response for a civilized community to make as the punishment of serious physical illness by the Erewhonians. Curative treatment, and not repressive punishment, is the response sanctioned by science and approved by reason to the physical, intellectual and emotional asymmetries of the

¹ S. Butler : *Erewhon*, 1919 Edition, pp. 94-5.

adolescent, and to the moral delinquencies resulting therefrom.

Such curative treatment can only be successfully undertaken under the guidance of trained experts ; for every case is different, and the therapeutic measures adopted should depend on accurate diagnosis just as much if the case is one of emotional defect as if it is one of physical illness. A well-qualified psychologist, preferably one who has also had a medical training, should diagnose each case, advise the magistrates as to the best course to adopt and supervise the curative treatment to be carried out by parents, probation officers or teachers. Some progressive authorities, notably London and Birmingham, have already moved in this direction, and have appointed psychologists to advise them on these and similar problems.

Equally, if not more, important than the provision of curative treatment *after* the delinquency has been committed is the discovery of the maladjustment *before* it has reached this stage. For example, in the case of Stanley Q,¹ previously described, the delinquency might have been prevented if it had been noticed that his progress in his school work was not commensurate with his ability and if psychological guidance had been sought as to the cause, or causes, of this discrepancy. Treatment might then have been recommended which, with the co-operation of parents and teachers, would have resulted in an earlier solution of his adjustment problems. Child guidance clinics have already been set up in many centres in England, Wales and Scotland for studying and treating such personality and behaviour problems in children. They are usually staffed by a psychiatrist, a psychologist and a social worker ; and maintain close relationships with the schools in the area. An expansion of this

¹ See pp. 84-5.

service would tend to prevent delinquency, both directly, by the early treatment of maladjusted children, and indirectly, by the education of parents and teachers.

Although the home is more frequently the major environmental factor contributing to the maladjustments of children, the school is also not always free from blame. An unsuitable curriculum may exaggerate a sense of inferiority in a child already lacking in confidence, and an over-emphasis on examinations may result in morbid fears and anxieties prejudicial to his or her mental health. When the school-leaving age is raised, it will therefore be of vital importance that there should be varieties of curricula and methods, well adjusted to the abilities, aptitudes and interests of the adolescents who have not previously been provided with secondary education. If the curriculum is only a pale copy of the traditional academic curriculum of the grammar school, not only will little be gained from the extended period of training, but there will be a widespread sense of futility—a breeding-ground of serious maladjustments. Bold experiments, designed in the light of the known facts concerning the nature and variety of adolescents and also of the needs of modern society, will be necessary to avoid this contingency and to obtain full value for the projected and long overdue reform.

NOTES ON FURTHER READING

Professor G. Stanley Hall devotes two chapters in *Adolescence* (Appleton, 2 vols., 1904) to the consideration of pathological cases, including cases of delinquency (Vol. I, Ch. V). Professor Cyril Burt's more recent investigations since the appearance and practice of psycho-analysis have resulted in more accurate diagnoses, and consequently in a deeper understanding of the causes of juvenile misdemeanours. See articles by Dr. Burt in *Psyche*, January and April 1922, on "The Causes and Treatment of Juvenile Delinquency"; in the *British Journal of Medical Psychology*, 1923, on "The Causal Factors of Juvenile

Crime"; and in the *Journal of Experimental Pedagogy*, March, June and December 1921, on "The Dreams and Daydreams of a Delinquent Girl"; also in *The Young Delinquent* (University of London Press, 1925). In particular, Dr. Burt and other psychologists (see Symposium on Delinquency and Mental Defect, British Psychological Society, April 1923) now recognize emotional or temperamental defect, as distinct from intelligence defect, as a cause of delinquencies. Two books that approach the study of adolescence from the medical side, namely Dr. P. Blanchard's *The Care of the Adolescent Girl* (Kegan Paul, 1921) and Dr. C. Stanford Read's *The Struggles of Male Adolescence* (Allen & Unwin, 1928), contain useful studies of adolescent pathology. Prof. J. C. Flügel's *The Psycho-Analytic Study of the Family* (Hogarth Press, 1921) treats of the development of an individual in relation to the family group, and there are chapters (VI and VII) dealing explicitly in this connection with abnormalities of development.

The results of a statistical inquiry into juvenile delinquency in selected cities in England and Wales are published in A. M. Carr-Saunders, H. Mannheim and E. C. Rhodes' book entitled *Young Offenders* (Cambridge University Press, 1943).

Child guidance clinics in England and Wales are associated in a "Child Guidance Council," which from time to time issues *Reports* on the progress of this work.

CHAPTER VIII

THE MEANING OF SECONDARY EDUCATION

THE Butler Act provides for the raising of the school-leaving age, first to 15 and subsequently to 16. It will be remembered, however, that the period of early adolescence, the third and last springing-up period in the life-histories of individuals, extends from 11 or 12 to 16 or 17. The two steps proposed for the raising of the school-leaving age should therefore be regarded as essentially one reform, namely the providing of secondary education for *all* during this period of rapid many-sided development.

In recent years there has fortunately been a growing revolt against a narrowly intellectualistic view of education among many educational workers in different parts of the educational field. It is being increasingly realized that education is not synonymous with book-learning, any more than it is with vocational training. It is, of course, true that every normal individual should be trained to do some useful work which might enable him to earn a livelihood, and that he should develop such intellectual powers as he possesses. But the earning of a livelihood and the processes of thinking are not the whole of a man's life. They are only part of the difficult and heroic art of living. "I am come," said the greatest of all teachers, "that they might have life, and that they might have it more abundantly." Not more proficiency in earning a livelihood, not more knowledge, not even more intelligence, but more abundant life—that is the supreme aim of education.

In interpreting this aim it should be remembered that

human experience in general and the great Christian witness in particular have shown that abundant life comes to the individual through obedience to the paradoxical law that "whosoever will lose his life, the same shall save it." An individual does not live abundantly through selfish concentration on the development of his own powers. Health, poise, joy, the marks of abundant life, are found where there is forgetfulness of self. Indeed, the individual only attains abundant life through service to his fellows and devotion to the purposes of the spiritual universe of which he conceives himself to be a member. It is in adolescence that abundant life in this sense first becomes possible. The chrysalis stage of self-centred childhood is past, and there is such a great accession of life energy to the individual that new powers are developed and flights into new realms of experience become possible. If the environmental conditions are appropriate, the creative forces at work within the individual will express themselves not only in physical and mental growth, but also in emotional, social and spiritual adjustments. *Secondary* education should, then, provide for these many-sided developments characteristic of youth. The matriculation requirements of Universities, which in many cases are relics of an over-intellectualistic tradition, should no longer be allowed to dominate the training given to adolescents, most of whom will not proceed to Universities, and all of whom will need something more than academic training to acquire skill in the difficult and heroic art of living. Education is not the pouring in, or the hammering in, of knowledge : it

" Rather consists in opening out a way
 Whence the imprisoned splendour may escape
 Than in effecting entry for a light
 Supposed to be without." ¹

¹ Browning : *Paracelsus*.

Primary education is the opening out of ways in which the powers of *children* may express themselves: and similarly, *secondary* education must be adjusted to, and determined by, the needs and creative developments of *adolescents*.

The consideration of the main lines of development during adolescence has revealed the need for careful provision for physical development during this period. During the War, although there have been many other setbacks, there has nevertheless been a considerable expansion of the provision of school meals and milk at the secondary, as at other, stages of education. The new Act converts the present power of Authorities to make such provision into a duty; and provides for grants at special rates in respect of such expenditure.

At present the medical supervision of the majority of adolescents is being truncated by the early school-leaving age at a time when it is most necessary. There is also considerable evidence to show that the medical inspection of pupils between 11 + and 14 is often not sufficiently frequent, in view of the rapid physical changes characteristic of early adolescence. Even in secondary schools, where most of the pupils remain until the end of the period of rapid growth, treatment has not always followed inspection. The proposed raising of the school-leaving age and the compulsory attendance (at least, part-time) of all adolescents at an educational institution until the age of 18 will provide opportunities for regular medical supervision throughout the period of greatest stress. When the gap between inspection and treatment is also bridged by a comprehensive national health service, early adolescence will less frequently be an age of damage.

In addition to the basic provisions of good nutrition and adequate medical supervision, there is also need at the secondary stage for appropriate health, including sex,

education. Games and outdoor occupations are not only enjoyed by the majority of adolescents, even of the more intellectual type, but they are necessary if the individual is to be trained to live abundantly. The increase in the attention paid to physical education and games in existing secondary schools has been very marked in this country in the last two or three decades ; but even now the reports of Medical Officers on the health of grammar school pupils suggest that all-round development is being hindered by excessive attention to academic studies, at least in the case of girls. The need for rest, as well as games and physical exercise, is only imperfectly realized at present, and the homework set in grammar schools is often such as to lead to overstrain and exhaustion. Many parents are seriously concerned about this, for they realize that academic success may be purchased at too great a price if it means impaired vitality for years, or perhaps even for life. It is not only bodily health that suffers from such overstrain during adolescence. Sometimes students come up to the University with good Higher Certificates but showing signs of mental exhaustion. Their originality and vigour of mind have been adversely affected ; their earlier zest in intellectual work has largely disappeared, and their mental powers seem to have wilted from early forcing. The scientific investigations of the Industrial Fatigue Research Board on hours of labour and output of work should make even those educationists who regard examination successes as supremely important pause to consider the possible effects of a long working day for secondary school pupils. If operatives working 51 hours a week have a larger output than others on the same class of work working 66 hours a week,¹ it seems not unlikely that excessive homework, and therefore too long a working day for adolescents, may result in a

¹ C. S. Myers : *Applications of Psychology*, 1919, p. 15.

decrease in the *quantity* of work accomplished. In any case, the *quality* of intellectual work done in a 9 or 10 hours' working day (which seems to be expected of some grammar school pupils) is bound to be of an inferior kind. In their wisdom, most adult intellectual workers limit their working day so that originality and cogency do not suffer. Such restraint can hardly be expected of the adolescent, certainly not of the adolescent girl. One of the first duties of her teachers, with their greater knowledge of the laws which govern mental efficiency and physical growth, should therefore be to give her a clear lead against excessive homework; but in actual practice, subject specialists are often the greatest sinners in encouraging her to break the laws of healthy harmonious development of body, mind and character.

Not only is there need for proper rest and physical exercise during this time of rapid development of body, there is also need for the *joint* exercise of mind and body. It will be remembered that a large proportion even of "intellectuals" find their greatest joy during adolescence in some practical occupation or in the pursuit of some art or craft.¹ This fact suggests that the proper balance has not yet been found in the ordinary grammar school between the two great media of education, speech or language on the one hand, and the handicrafts on the other. In the past, books and languages (ancient and modern) have occupied the first place in the discipline of the secondary school. Indeed, the tongue has been an "unruly member" in the educational system generally, and consequently the hand has not been such an important instrument for mental development as it might have been. There are signs that the educational value of creative work with the hands is being realized in infant and elementary schools, and there have already been

¹ See p. 35.

some striking experiments in this direction in junior technical, central and senior schools, but there is still a reluctance among some grammar school teachers to acknowledge the intellectual respectability of the crafts. Although the dullards are sent to the art studio, the manual room, the garden or the domestic-science kitchen, the more intelligent boys and girls are frequently denied that *joint* exercise of mind and body which they would most enjoy during a period of rapid physical development. To this extent, secondary school education is not yet emancipated from slavery to the printing press. A clever boy who is being made to study English, French, Latin, Greek and Mathematics, and who does no practical science or handwork, is being treated as though his mind functioned *in vacuo* and not in a growing body. Yet this happens in some secondary schools where there is still a lingering, though unexamined, belief that work with the hands, even creative work, has not sufficient intellectual respectability to justify the spending of time upon it.

There have always been some thinkers, from the time of the writer of Ecclesiasticus until to-day, who have contrasted work with the hands and work with the head to the disadvantage of the former. "The wisdom of a learned man cometh by opportunity of leisure: and he that hath little business shall become wise. How can he get wisdom that holdeth the plough, and that glorieth in the goad, that driveth oxen, and is occupied in their labours, and whose talk is of bullocks?"¹

Recent psychological analyses have, however, given support to the opposing view, which has also always had its supporters, namely, that the acquiring and use of skill may bring wisdom. The researches of Professor Pear,²

¹ Ecclesiasticus xxxviii, 24 and 25.

² T. H. Pear: *Skill in Work and Play*, 1924.

for example, have cast doubt on the earlier view that the development of skill does not involve higher thought processes. The acquiring of some proficiency even in a game, such as golf, is not entirely a matter of trial and error, but is aided by analytic thought and the grasping of certain abstract principles. The contrast between the acquiring of skill and the acquiring of knowledge must therefore not be made too sharp. There are opportunities for perception, imagination, judgment, reasoning, indeed for all the ordinary conscious thought processes, in practical work of the right kind, just as there are in literary studies. But there are also opportunities for new bodily adjustments by the acquiring of skill in the use of tools: there is a discipline of unconscious mental processes as well as a training of conscious thought. The therapeutic effects of craft work have been clearly revealed in cases of severe nervous breakdowns; and during early adolescence, when there may be considerable emotional disturbance, tension may be relieved through music, and serenity and poise recovered through the practice of a craft.

"Great readers," says Professor Whitehead, "who exclude other activities are not distinguished by subtlety of brain. They tend to be timid conventional thinkers. . . . To a large extent, book-learning conveys second-hand information and as such can never rise to the importance of immediate practice. . . . The second-handedness of the learned world is the secret of its mediocrity. It is tame because it has never been scared by facts."¹ Although the emergence of language was perhaps man's greatest single achievement and although its use and mastery are essential for full individual development, yet a system of secondary education which divorces words from practical interests and projects,

¹ A. N. Whitehead: *The Aims of Education*, 1929, p. 79.

making them ends in themselves, is more likely to produce parrots than thinkers.

Furthermore, the intellectual value of a purposive activity is not to be measured solely by the mental processes involved in its immediate pursuit. It may be related to a whole circle of interests and ideas, and its practice may therefore reveal some new meaning of the Universe and be critically important in the development of an adequate philosophy of life. Who would venture to affirm to-day that the man who can spell "onions" and cannot grow them is wiser than he who can grow them but cannot spell them? The chances are all the other way; for the practice of the craft of gardening gives many opportunities for reflection on the wonders of growth and the meaning of life, and may bring wisdom and understanding.

The value of the arts and crafts in the education of the adolescent can never be truly assessed by considering only their intellectual possibilities. Their appreciation and practice meet other needs which are characteristic of the period. The growth of the body and the consequent need for its re-education, the development of the æsthetic emotions and the related necessity for the education of taste, the tendency to day-dream and the need in some cases for its correction, all reinforce the claim for a less bookish secondary education even for "intellectuals." They, like all adolescents, need education of the hands as well as of the tongue, training of the emotions as well as of the intellect.

Of even more importance in the education of the adolescent is social training. Neither narrowly vocational training, with its continual appeal to self-interest, nor even more cultural studies in a school community run on competitive lines will be sufficient to meet the needs of these years. It is true that systematic study may result

in the development of the individual's *intellectual* powers ; but if he is continually encouraged through competition and does not have sufficient opportunities for co-operation with his fellows, he will tend to remain self-centred, and the socializing of the self natural to this period will be delayed. There may, therefore, very naturally result a clever schemer, seeking self-advancement, who on account of his educational opportunities has simply become more capable of outwitting his fellows. In such cases, the true objective of secondary education has not been reached. Little skill has been acquired in the difficult art of living in a community.

Even the most sympathetic critic of existing secondary schools has to acknowledge that the proportion of failures, as judged by this instead of the usual examination standard, is still somewhat high. Although there have been widespread developments in social education and in the use of co-operative methods in work and play within recent years, there are still too many boys and girls leaving secondary schools who think only of their own advancement. They have not realized that all true education is for service and not for domination.

What is needed during the period of youth is that boys and girls should have opportunities of membership, and responsibilities, in a vitally organized community founded on principles of fellowship, and thus should be saved from the egoism of childhood. They should learn how to live harmoniously with their fellows, how to be loyal to their group, and how to approach their future vocation and civic responsibilities in the spirit of service.

It is sometimes claimed that boarding schools are better able than day schools to give the social training appropriate to the period of early adolescence. In cases where parents are dead, or abroad or unable to set up homes, or where home conditions are unfavourable,

boarding school education may be the desirable solution, though it should be remembered that the amenities and the staffing ratios need to be very generous for the successful running of a boarding school. There is, however, a great deal to be said for the social training of a good home and a progressive day school, where the adolescent has opportunities for intimate relationships (in the home), for co-operation with his equals (in the school) and for meeting both sexes, different generations and social classes by participating in the local community life. It will be readily acknowledged that the independent residential public schools have been wonderfully successful in training their pupils to live in a community, but unfortunately the community has usually been too narrow and its interests too circumscribed to serve as an adequate preparation for adult life in a democracy.

Youth Clubs, pre-service training units, the secondary schoolboys' and schoolgirls' camp movements, and the dramatic, scientific and athletic societies which flourish so much in day schools are valuable experiments in social education, but many of these are in a sense outside the ordinary routine work of the school. With few exceptions, that work is not yet organized to utilize the team spirit and to train the social emotions of adolescents.

It has already been pointed out that another great development that usually occurs during adolescence is the search for an ethical code and for a religion or a philosophy of life. The secondary school should therefore make suitable provision for the moral and religious education of its pupils. Two fundamental principles need to be remembered in this connection : firstly, that moral training cannot be relegated to one subject and fixed hours of instruction, but necessarily permeates the whole curriculum and life of the school ; and secondly, that in the religious instruction given, account should be taken

of the growing need for the psychological independence of adolescents as well as of the wishes of parents. How far these *educational* principles are recognized in the provisions concerning religious education in the Butler Act will be considered in a later chapter, but, at the outset, the need for fostering the moral and spiritual development of individuals should be clearly recognized as an essential element in secondary education.

There is one great hindrance in the way of the practical realization of this broader ideal of secondary education, and that is the widespread and almost superstitious regard for examination successes. It is not so much the examinations themselves that are to blame. They have been very largely adjusted to the needs of intelligent adolescents both in regard to age of entrance and to the variety of subjects possible. It is the false importance attached to examinations by educationists, parents and the community generally that is the root of the trouble. When will it be realized that the possession of a school-leaving certificate (valuable as that may be for certain practical purposes) is no guarantee of social and spiritual growth? It is no guarantee that the individual possessing it has even begun to see the Universe the right way up, has acquired any real skill in the art of living with his fellows or has any sense of ultimate values. A pupil may have the best certificate in the school and yet be entirely self-centred, having scarcely a thought for others or for a life of service. He may be the first in the acquiring of knowledge and the last in the acquiring of skill in the art of living. He may be successful in examinations and unsuccessful in the real growing-up process. What seems to be needed is that, in educational circles at least, first things should be put first. Parents and pupils will have to be persuaded to "seek first" abundant life for service to, and the good of, the community; and if they

do this, it may very well be that certificates will be "added unto them."

NOTES ON FURTHER READING

Professor A. N. Whitehead's work on *The Aims of Education* (Williams & Norgate, 1929) is a great contribution on the general question of the meaning of education. Dr. L. P. Jacks' book entitled *The Education of the Whole Man* (University of London Press, 1931) is a plea for the recognition of the many-sidedness of individual development. Though neither deals explicitly with the problems of adolescence, the general principles discussed are largely applicable to the period.

In Mr. Aldous Huxley's *Ends and Means* (Chatto & Windus, 1938) there is a chapter (XII) on Education, which is both illuminating in regard to the meaning of education and provocative in regard to the shortcomings of the present educational system and methods.

Sir Cyril Norwood's *The English Tradition of Education* (J. Murray, 1929) is a valuable, though perhaps an unduly optimistic, interpretation of the ideals of English Public Schools.

Dr. A. J. Brock's article on *The Effect of Handicraft on Mind and Body* (Report of the Conference on New Ideals in Education, 1919) is an interesting account of the remedial effects of hand-work on shell-shock cases.

CHAPTER IX

SOME PROBLEMS OF REORGANIZATION— SECONDARY EDUCATION

THE Butler Act provides for the raising of the school-leaving age to 15 and eventually to 16, the abolition of fees in all types of secondary schools maintained by Local Education Authorities and the administering of all post-primary schools under one secondary code of regulations. It also makes provision for compulsory further education (full time or part time) up to the age of 18. Within this general framework for the reform of adolescent education, there will be certain alternatives possible, and at least some of the administrative problems that will arise in implementing the provisions of the Act will only be satisfactorily solved by a consideration of the relevant psychological and sociological data. Although for convenience those questions relating to the *secondary* stage of education will be first discussed, and those relating to *further* education and to the *service of youth* will be postponed to a later chapter, it is obvious that the reform of adolescent education should be conceived of, and planned, as one organic whole.

Differentiation of Provision.—Under the Hadow scheme for the reorganization of education many interesting experiments in the differentiation of adolescent education have been tried out in senior, central and junior technical schools. There has, however, been one obvious stumbling-block in the way of success, namely, the inferior status of the newer schools as compared with older secondary schools. Not only have senior and central schools been administered under the primary, instead of the secondary,

code ; but their buildings, equipment and amenities have often been inadequate for the secondary stage of education. The competitive examination for entrance to the secondary (grammar) school, the longer school life, the smaller classes and the higher salaries of the staff were symptoms of a social barrier between the older and newer forms of adolescent education. Nothing could have more effectively dubbed the senior and central schools as "inferior" than the lower salary scale of their teachers. For example, the present seriousness of the problem of the staffing of senior schools is at least partly due to this cause. Under war conditions not only have they lost the younger members of staff by their being called up for national service, but as the shortage of secondary school teachers has, for similar reasons, become acute, more and more of the better qualified specialist teachers in the senior schools have obtained appointments in the secondary schools (on the higher salary scale). There can be no doubt that the loss of particular members of staff and the general instability of staffing of the senior schools have prevented many promising educational experiments from coming to fruition, and have indeed tended to squeeze the very life out of the senior schools.

Under the provisions of the Butler Act some of these difficulties will disappear, but their existence in the immediate past has revealed the truth that certain forms of differentiation of educational provision are alien to the basic conception of a democracy. The intrinsic value of the individual is the corner-stone of the democratic view. This implies that every individual in a democracy should be educated according to his gifts and potentialities and irrespective of the family, class, or region to which he belongs. Differentiation of educational provision must therefore be child-centred, that is, it must be solely governed by the abilities, interests and aptitudes

of the individuals and not by social barriers, erected to protect vested interests. For example, it is obviously in accordance with democratic principles to make differentiated provision for the education of handicapped children—such as the blind, deaf, crippled or mentally defective—to suit their special needs. Similarly, there is nothing undemocratic in differentiating secondary education to suit the great range of abilities and aptitudes found in the adolescent population, provided that this is effected in such ways as will both increase the chances of full development for each individual and will also lead to a closer integration of society.

In the Norwood Report ¹ and in the Government White Paper on *Educational Reconstruction*,² it is assumed that the differentiation of provision should be effected by the setting-up of three kinds of secondary schools—namely, grammar, modern and technical schools—all recruiting their pupils at 11+. The grammar school is to be for pupils “interested in learning for its own sake”; the modern school is to offer “a general education for life, closely related to the interests and environment of the pupils”; and the technical school is to be for pupils “with a practical bent,” preparing for entry into industry or commerce.

Serious doubts are bound to occur in the minds of educational psychologists in regard to this plan for differentiation. What positive evidence is there, for example, that at the age of 11 many, or any, children are “interested in learning for its own sake”? Is there not, indeed, considerable evidence to suggest the opposite view that although towards the end of the secondary school period, under conditions of social security, there may begin to develop a love of learning for its own sake,

¹ *Curriculum and Examinations in Secondary Schools*, H.M.S.O., 1943.

² H.M.S.O., July 1943.

at the beginning of that period thought is much more closely related to purpose and action, even in intellectually highly gifted children? When the Norwood Committee's recommendations on examinations in grammar schools are carried into effect and the driving force of the desire for examination success is diminished, as it should be, it will be even more important to reconnect intellectual interests with the practical needs out of which they originally arose, if standards of work are to be maintained. This criterion of suitability for a grammar school education—namely, the possession of "interest in learning for its own sake"—will then become entirely meaningless, or at least completely irrelevant to the stage of development at which it is suggested that it should be applied.

Consider, in the second place, the proposed technical school. Will secondary education really be child-centred, if, at an early age, pupils are directed into a particular form of education, differentiated on a vocational basis? At 11 + a boy's powers are so untried, his interests are so undeveloped and the organization of his emotions is so subject to fundamental change, that to exact a decision from him in regard to his future vocation is certainly forestalling nature, and consequently is likely to prejudice his chances of free and full development. If children of 11, of the same intelligence level, could be shown to differ markedly in "verbal" and "practical" abilities, there would be a case for the suggested differentiation between grammar and technical school, the education in the former being suited to those with good general intelligence and high verbal ability, and the training in the latter being appropriate for those with good general intelligence and high practical ability. But the evidence goes to show that, with few exceptions, the children with good general intelligence are superior in both verbal and practical abilities, and that special aptitudes do not usually reveal

themselves so early as at 11 +.¹ The problem of the sorting out of the pupils for the three kinds of schools appears therefore to be insoluble. But even if it were possible to discover the appropriate pupils for technical, as contrasted with grammar, schools, the result would only be to produce another type of unbalanced person—namely, the technician—so absorbed in the material universe as to be unable to appreciate ultimate values. The grammar school has already given us the grammarian, so intent on juggling with words and symbols as to be unable to maintain direct contact with reality itself. It is difficult to see how civilization can escape disaster if during the formative stage of early adolescence some of the most highly gifted pupils are trained to be technicians, others to be grammarians and none to be whole individuals.

In the light of recent intelligence and attainments surveys the obvious recommendation is to have two types of secondary school both "offering a general education for life," but the one appropriate to a higher, and the other to a lower, range of intelligence and attainments, their curricula differing in weight and complexity. Each type of school would have bifurcated courses adjusted to a different emphasis on academic and practical interests; but only towards the end of the school period, when there have been adequate opportunities for many-sided development and for educational and vocational guidance, would the curriculum begin to be adjusted to a particular calling or group of callings. The two-school differentiation has this one advantage over the three-school, namely, that the selection of pupils could be made on fairly clear scientific evidence and with relatively few mistakes.

¹ See C. Burt: "The Education of the Young Adolescent," *British Journal of Educational Psychology*, Nov. 1943.

There are, however, certain disadvantages common to both the two-school and the three-school method of differentiation. In the first place, the segregation of different levels of ability is hardly likely to give the kind of social training suitable for a democracy, where citizens of all normal levels of ability have equal rights and responsibilities and need to understand and to co-operate with one another. In the second place, it is more difficult to rectify mistakes of selection when the pupils are in separate schools, than it would be if they were in differentiated sides of the same school.

The conception of the multilateral secondary school, which seeks to provide for the diverse aims, interests and abilities of all or most of the adolescents in a typical community, with progressive differentiation of curricula as the aptitudes of pupils reveal themselves, is undoubtedly attractive and merits serious consideration on both psychological and sociological grounds. It is significant that the Butler Act, unlike the White Paper, leaves the question of the method of differentiation open, and it is therefore possible for progressive authorities to make experiments in this direction. The L.C.C., for example, has already decided to reorganize its secondary system on the multilateral plan. The practicability of the multilateral secondary school has been demonstrated in recent years by such experiments as that of Dr. F. M. Earle¹ at the Kirkcaldy High School, and, with a more limited range of pupils' abilities, that of Mr. J. O. Cheetham at the Cathays High School for Boys, Cardiff, and of Mr. Trevor Lovett at the Vaynor and Penderyn Secondary School.² The old Public Schools too, while restricting entry to certain social classes, have clearly shown that it is

¹ F. M. Earle : *Reconstruction in the Secondary School*, 1944.

² "A Multilateral School in a Rural Area," *The Times Educational Supplement*, January 27th, 1945.

possible to educate together pupils of a wide range of native abilities, provided that the staffing is sufficiently generous. Undoubtedly in rural areas, where the adolescent population is relatively small and where the pupils in the existing secondary schools are too few to have a vigorous social and athletic life, the multilateral school is the obvious solution to the problem of the extension and reform of secondary education.

Co-education.—The facts already reviewed concerning resemblances and differences between boys and girls¹ should also have a bearing on the solution of problems of differentiation. Should there be separate secondary schools for boys and girls or mixed schools for both? It is true that the English tradition favours separate schools for boys and girls at the adolescent stage. This essentially undemocratic view has been reinforced, no doubt, by the obvious consideration that the organization and management of a school for boys or girls is in some respects simpler than that of a mixed school. Yet, if social training is so important during adolescence, a very strong case could be made out for the mixed school, which gives opportunities for co-operation between the sexes. The intellectual differences between boys and girls are not any greater than those found between members of the same sex, and although the physical differences and special interests would have to be taken into account, it is an open question whether this variety would not be found to be useful in the development of the corporate life of the school. For example, suppose that the girls should tend to take cookery and household management and the boys woodwork and metal work as their special crafts. This would tend to increase the complexity of the organization of the school, but it would also give added opportunities for practice in co-operation.

¹ See Chapter VI.

The cookery class might help in the preparations for a school party, in which all would participate ; and the woodwork or metal work group might co-operate in the production of utensils or articles of furniture useful to the kitchen. The whole social life of the school would be more natural, and consequently, if the school were well run, would be a better preparation for adult life.

The task of running a mixed school for adolescents is certainly more difficult than that of managing a boys' or a girls' school : but it has been accomplished with such marked success in some secondary schools, notably in Scotland and Wales, and in many senior schools, that it is to be regretted that more encouragement has not been given to bold experiments in social education of this kind. Developments in this direction may have been retarded by the very real difficulty which arises in regard to the appointments to headships in mixed schools. But although the majority of schools might very well separate the sexes, yet where there are teachers with a great faith in co-education, it would seem to be a pity to discourage them from undertaking experiments which would in any case be useful for purposes of comparison, and which might reveal possibilities of a higher order of social education than that now sanctioned by tradition.

Boarding Schools.—In the reconstruction of adolescent education the place of the boarding school needs consideration. In the case of pupils whose parents are dead or abroad or whose home conditions are unfavourable, boarding school education at the secondary stage may be desirable, and adequate arrangements for these and for weekly boarders, who would otherwise have excessive travelling to and from the secondary school, should be made by Local Education Authorities. But the assumption made by the Fleming Committee, appointed "to consider means whereby the association between the

Public Schools and the general educational system could be developed and extended," that there are other pupils, though these are not even vaguely defined, who need a boarding school education, is hard to justify. Indeed, there is considerable evidence which suggests that the social training of a single-sex boarding school is not so balanced or so likely to lead to mental and emotional health as the combined training of a good home and a progressive day school.

The Fleming Report,¹ however, recommends that State bursaries should be awarded to qualified pupils, who have previously been educated for at least two years at a grant-aided primary school, to enable them to proceed to boarding schools accepted for inclusion in the scheme. The amount of the award is to cover the remission of tuition and boarding fees and other expenses, according to an approved income scale. It is also recommended that the schools accepted for this scheme should be required to offer a minimum of 25 per cent. of their annual admission to such pupils; and that the awards should be made by Regional Interviewing Boards appointed for the purpose, and not by means of competitive examinations. The remaining 75 per cent. of pupils admitted would presumably be from those whose parents could afford to pay the relatively high fees.

The schools to be included in the scheme are the independent public schools or those of their number willing to co-operate. In the past, these have been outside the State system, but owing to their social prestige their pupils have been privileged in regard to appointments out of all proportion to their abilities and achievements. The public schools have undoubtedly made valuable contributions to educational theory and practice, but

¹ *The Public Schools and the General Educational System*, H.M.S.O., 1944.

their independent existence, involving the segregation of the children of certain social classes, has not made for a well-integrated democratic society.

The terms of reference of the Fleming Committee precluded the consideration of such fundamental questions as the need for a unified, though not uniform, system of education in a democracy, the desirability or undesirability of giving financial support from the State to independent schools not subject to democratic control, and the advisability or inadvisability of spending disproportionate sums of public money on the education of the few, when the amenities and staffing of the State schools, providing for the many, remain so much below the level required. It is surely impossible in a democracy to justify the use of public funds either for the encouragement of snobbery in parents or for the giving of artificial respiration to private educational institutions, which would die if left to themselves. Few democrats would favour the abolition of independent schools by Act of Parliament. If there are parents who are prepared to pay for the private education of their children in well-conducted schools, rather than participate in the general educational system, they should be free to do so until such time as the system breaks down: but to bolster up the private system at public expense is to put obstacles in the way of the gradual evolution of a unified democratic educational system and of a more completely integrated society.

Selection and Transference of Pupils.—The extension of provision for secondary education to cover all normal adolescents will, when effected, disrupt the present bottleneck between the primary and secondary stages of education. At present, children of 11 are subjected to the strain of a competitive examination on which not only their future schooling but their future careers may

depend. In some cases, this leads to over-anxiety or to a disheartening experience of failure to fulfil the expectations of parents. There is ample evidence, too, to show that the system of a single examination, usually consisting of papers in English and Arithmetic, is unreliable as a means of selecting pupils who will profit by a secondary (grammar) school education. Further, it tends to cramp and distort the junior school curriculum and to prevent it from becoming truly child-centred.

Assuming that an Authority decides to proceed by the setting-up of the three kinds, or the two kinds, of secondary schools previously described, it seems from the evidence of surveys of intelligence and attainments¹ that the proportion of pupils for whom grammar and technical education (in separate or combined schools) would be suitable would be about one-quarter of the total for whom provision would need to be made. The question arises on this assumption—How are these to be selected and how are they to be further sifted into grammar and technical high schools, if these are separate institutions?

The proposed method of selection to take the place of the Special Place examination is described in the Norwood Report in the following words: "We suggest that differentiation for types of secondary education should depend upon the judgment of the teachers in the primary school, supplemented, if desired, by intelligence and other tests. On the basis of these combined verdicts a recommendation should be made that a pupil should continue his education at the type of school appropriate to him, due consideration having been given to the wish of the parent and the pupil."²

It is necessary to examine this suggestion closely, for

¹ See Chapter V.

² *Curriculum and Examinations in Secondary Schools*, H.M.S.O., 1943, p. 17.

the whole success of the scheme for the differentiation of secondary education will turn on the effectiveness of the method employed for sorting the pupils into schools appropriate for them. It will be noticed that intelligence and other tests may be used, if desired, though desired by whom is not clear. Presumably they may also not be used, if desired, and the recommendation affecting a pupil's future education may be based solely on the estimate of the primary school teacher and the wishes of parents and pupil. The difficulty of making a fair judgment of pupils, educated in large classes, by a teacher without special training for such assessments and subjected in some cases to pressure from parents, is too serious to be ignored.

This is just the kind of problem for the solution of which scientific investigations might be expected to prove useful. It is, however, not revealed what evidence (if any) concerning the reliability of the judgment of the teachers was examined by the Norwood Committee before it pinned its faith on this alternative to the Special Place examination.

In an unpublished investigation on "Secondary School Selection" in Monmouthshire Mr. W. A. Bishop put this issue to the test, though naturally only in a limited area and under localized conditions. The heads of seven primary schools were asked to classify the candidates from their schools entered for the same Special Place examination. The scheme for classification was as follows:—Pupils who were considered to be well above the average and were likely to enjoy a successful career in the secondary (grammar) school were to be placed in Class I. Pupils who were considered to be less outstanding than those in Class I, but who nevertheless were quite fitted for secondary (grammar) school training were to be placed in Class II. Class III was to contain pupils

with only moderate ability but with compensating character qualities, and pupils with marked ability who failed to display the character qualities which would enable them to use their abilities to the full. In Class IV were to be placed the pupils of only moderate gifts ; and in Class V the pupils definitely below average who were unlikely to derive much benefit from a secondary (grammar) school education. It was explained in a covering letter that the information given by the head would have no effect whatsoever upon the results of the Entrance Examination conducted by the L.E.A., but would be used for experimental purposes only by the University Department of Education.

The following session many of the pupils concerning whom there had been confidential reports from the heads of the primary schools were admitted to the secondary school at which the investigator was a master, and their subsequent records in that school were carefully kept. It was therefore possible to place side by side the classification of the primary school teachers, the result of the qualifying entrance examination (which consisted of papers in English and Arithmetic together with an Intelligence test) and the subsequent secondary school record.

The results were certainly suggestive. Although no children in Class V succeeded in qualifying for entrance, representatives of each of the other four classes were found among pupils gaining entrance and subsequently making good, fair and poor progress in the secondary school. The only conclusions that could be drawn were that the primary school heads appear to be able to recognize a small percentage of their pupils who are incapable of profiting from a grammar school education, but that the recommendations of primary school teachers, taken by themselves, are not a reliable indication of later grammar school success.

The wishes of the parents, though obviously these should be considered, are also not entirely reliable criteria for the placing of the pupils. Some fathers and mothers are over-ambitious for their children; others fail to appreciate their potentialities. A system of family allowances would no doubt do much to enable many parents, otherwise dogged by feelings of insecurity, to make unprejudiced judgments concerning the true interests of their children. But it is snobbery, and not insecurity, that is the most common cause of distorted parental judgments. Some objective tests will therefore be necessary if justice is to be done to the nation's children: and there is consequently need for much research into the methods of keeping school records and the use of repeated and progressive tests of abilities before we can hope to reach an adequate solution of the problem of selection if there are different kinds of secondary schools, or of educational guidance if the pupils are in one multilateral secondary school.

The method of selection recommended by the Fleming Committee for the award of State bursaries tenable at public boarding schools—namely, assessment by Regional Interviewing Boards—seems to be entirely inappropriate for children of the age of 11 +; and because of the subjective nature and the indefiniteness of the criteria of selection would also be liable to grave abuse.

However accurate the methods of selection for the various types of secondary education may become, there will always be occasional need for the transference of an individual from one type of school to another. Late development or early precocity not fulfilled may necessitate a change in one direction or the other. It is obviously important that transference should take place either way, so that the idea of horizontal differences in secondary education should be gradually substituted for the present false

view of higher and lower forms of adolescent education. This can only be done effectively through the close co-operation of the heads of the various kinds of schools in one locality. It would therefore seem to be wise for *common* governing bodies to be responsible for the administration of the different kinds of secondary schools in one area, the head of each school, whether grammar, technical or modern, as well as a representative or representatives of the assistant staff, being also in attendance at governors' meetings.

In the multilateral secondary school it will likewise be necessary to have school records carefully kept and systematic tests of aptitudes recorded, so that the education given can be adjusted to the needs of the individuals. A school organized on this plan has, however, one overwhelming advantage, namely, that the transference of a pupil from one course to another is relatively easy in practice, and can be effected without uprooting the individual from the school-society to which he has become bound by ties of friendship and loyalty.

Examinations. Educational and Vocational Guidance.—The highly competitive examinations for entrance to the secondary schools will disappear if and when sufficient provision is made for the continued education of all normal adolescents. The junior school of the future will therefore be freed from the pressure of the present 11 + examination requirements. But what of the secondary schools? Should they have school-leaving examinations? And, if so, of what kind?

At present, in the secondary (grammar) school there is an external school-leaving certificate examination which is usually taken by pupils of about fifteen or sixteen years of age, and a higher certificate which is taken two years later. The former certificate, under certain conditions, brings exemption from the matriculation or entrance

examinations of Universities. It is very doubtful whether it is in the best interests of the schools that the school-leaving certificate, which will naturally be taken by many pupils who do not intend to proceed to Universities, should be associated with University requirements. If matriculation exemption were gained on a higher certificate of a somewhat less specialized nature than the present one, the school-leaving certificate would not be deflected from fulfilling its true function as a leaving certificate for pupils going out into the world at about the age of sixteen.

The history of secondary education is shot through with instances of serious interference with the development of individuals through the examination system. The junior certificate, which used to be taken at the age of 13 or 14—a critical time in the physical development of most girls—has now practically disappeared, and the grammar schools have to this extent more freedom in that there are four clear years before the first external examination.

The Spens Report,¹ which first advocated the three-fold division of secondary schools, recommended that in technical high schools there should be established a new kind of leaving certificate on the basis of *internal* examinations founded on the curriculum, though subject to external assessment. The Examining Bodies concerned with existing secondary schools have also travelled a long way in the direction of increasing the flexibility of school certificate examinations ; and the Norwood Report ² goes so far as to recommend that change in the school certificate examinations should now be in the direction of making them entirely internal. It is recognized that

¹ *Secondary Education, with special reference to Grammar and Technical High Schools*, H.M.S.O., 1938.

² *Curriculum and Examinations in Secondary Schools*, H.M.S.O., 1943.

there will need to be a long transitional period before this can happen ; and meanwhile the external examination should become a " subject " examination, pupils taking whatever subjects they wish to take.

It is, of course, true that employers sometimes demand examination certificates as a condition of appointment. But when school records are more carefully kept, and when there are repeated intelligence and aptitude tests under a properly devised educational and vocational guidance system, these will be available and will prove more illuminating in regard to suitability for appointment than success in external examination devised for other purposes. The presence of employers on the governing body of a group of secondary schools would be a great help in adjusting the schools to the needs of the neighbourhood and in solving the problem of finding suitable employment for the pupils. It seems therefore desirable that educationists should resist the imposition on the newer kinds of secondary schools of an *external* examination which would undoubtedly have the effect of stereotyping the curriculum and lessening the freedom of the teacher to adapt the work to suit each individual. They should undoubtedly make use of *internal* examinations, and should also endeavour to evolve an independent scientific system of educational guidance, which would in turn lead to adequate vocational guidance towards the end of the secondary stage of education.

For University entrance and the award of State and other University scholarships there will need to be examinations, conducted by the present Examining Bodies or by the Universities themselves ; but these external examinations should not be taken until the age of 17 or 18, and then only by pupils who intend to proceed to the Universities. It is obviously of great importance that the way to the Universities should be kept open to

all suitable candidates, no matter from what school or locality they may come. But this is no justification for the retention of an external examination for pupils leaving school at 16 who have no desire to proceed to the Universities. The time is approaching when in the interest of the individual pupil and of the increased freedom and responsibility of the teaching profession, the *first* school-leaving certificate examination should become internal, that is, conducted by the teachers at the school on syllabuses and papers framed by themselves. In this way, University requirements will gradually take their right place in influencing secondary education, and the schools will be free to adjust their curricula, syllabuses and methods to the common needs of the majority of their pupils and to the special needs of individuals.

NOTES ON FURTHER READING

In an important article entitled "The Education of the Young Adolescent: The Psychological Implications of the Norwood Report" (*British Journal of Educational Psychology*, November, 1943), Professor Cyril Burt shows that the psychological facts, especially those concerning the emergence of special aptitudes, do not appear to justify the allocation of children at the age of 11 to the three types of school envisaged in the Spens and Norwood Reports.

Dr. F. M. Earle's book, *Reconstruction in the Secondary School* (University of London Press, 1944), is a valuable account of the methods of study of pupils in a multilateral secondary school on which their educational guidance was based and the progressive differentiation of their courses was effected.

Professor Findlay's volumes, *The Foundations of Education* (University of London Press, 1925 and 1927), contain useful general discussions of the problem of co-education (Vol. II, Ch. VI). A more detailed treatment of the problem of co-education is to be found in B. A. Howard's *The Mixed School* (University of London Press, 1928).

CHAPTER X

SOME PROBLEMS OF REORGANIZATION

COUNTY COLLEGES AND THE SERVICE OF YOUTH

County Colleges.—The system of apprenticeship, which formerly provided supervision for the majority of young people at the beginning of their working lives, has of recent years only touched a small minority of entrants into industry (including agriculture). The problem of the transition from school to work under modern conditions has therefore still to be solved in this country. It is true that many Local Education Authorities have made provision for a great variety of evening classes in convenient centres, where boys and girls may voluntarily attend to continue their education in their spare time. But this development obviously only touches the fringe of the problem, for the young people who most need guidance in this difficult period of transition are the least likely to attend voluntarily after working hours; and even the ones who do attend are being subjected to an undue strain, hardly conducive to harmonious development, if they already have long hours of employment.

As early as 1907, a review of *Continuation Schools in England and Elsewhere* was published under the editorship of Sir Michael Sadler, in which the necessity for compulsory part-time day-continued education in an industrialized society such as our own was persuasively and courageously advocated. There was subsequently more than one private member's bill introduced into Parliament for the setting-up of day-continuation schools; and in 1918 a Government bill, providing for the compulsory part-time continued education of young people

between the ages of 14 and 18 during working hours actually reached the statute book. But the appointed day on which the Act was to come into operation was never fixed. At present there are only about forty day-continuation schools in being in this country, and, with one exception, attendance at these is either voluntary or is imposed by the employing firms. There is only one area, Rugby, where all boys and girls, not receiving full-time education elsewhere, attend the day-continuation school by statutory compulsion, as was intended by the Education Act of 1918.

Many reasons have been advanced for the failure of the day-continuation school sections of the Fisher Act. The fact that Local Education Authorities were to apply to the Board of Education for the fixing of an appointed day for their respective areas, and that no one day was appointed for the implementing of the Act throughout the whole country, provided innumerable loopholes for delay. Employers objected to the dislocation of industry which would result from the freeing of young employees to continue their education. Parents feared that there would be a reduction in the earning power of their boys and girls as a result of the change. Young people objected to going back to school when they were experiencing for the first time a measure of psychological and economic independence. Progressive educationists advocated the raising of the school-leaving age to 16 as a more desirable and a more democratic reform than the provision of part-time education from 14 to 18. In short, public opinion was not ready for the projected educational advance, and enlightened opinion viewed it without enthusiasm as a reform of secondary importance.

The Butler Act avoids most of these difficulties. The school-leaving age is to be raised to 15 and subsequently to 16; and the additional provisions for further part-

time education form part of a well-integrated scheme for reform. There is to be *one* appointed day, by which date every Local Education Authority must make provision for part-time education colleges for all young persons between the ages of 15 (or 16) and 18, who are not in full-time attendance at any school or other educational institution. There is to be no suggestion of going back to school but only of going forward to college ; and the institutions for part-time continued education are therefore to be called County Colleges.

In the light of the scientific facts concerning adolescence there can be no doubt of the desirability of this extension of educational provision. One of the major adjustments of the individual to society in the period of youth is the finding and the holding down of a job ; and with this the other life-adjustments—the finding of a mate, the acceptance of the responsibilities of citizenship and the finding of a working philosophy of life or a religion—are intimately interwoven. Indeed, work is not alien to, but is an essential element in, the growing-up process.

The difficulty caused by the long preparation period necessary for entrance into the professions is slight compared with that arising under modern industrial conditions from blind-alley occupations followed by unemployment. A young man or woman entering upon a long period of training for a profession has at least a definite ambition and a life-plan, with the aid of which he or she can hold other impulses in check ; but an unemployed adolescent, looking for any and every kind of work, living on the dole, has a very poor chance of harmonious emotional development. His times are bound to be out of joint. He finds a mate before he is trained by work to accept responsibilities and to consider the rights and needs of others.

The devastating effects of unemployment on the development of young people were plainly revealed by the Carnegie United Kingdom Trust inquiry during the years immediately preceding the second World War. Unemployed young men, between the ages of 18 and 25, attending Labour Exchanges in Glasgow, Cardiff and Liverpool were interviewed by investigators, who also visited their homes and tried to assess their living conditions and mental attitudes. The separate reports of the investigators proved most illuminating, and were afterwards collated and published in one report, entitled *Disinherited Youth*.¹

It was generally agreed that while some newly unemployed young men appeared to be anxious and alert, the great majority, and especially those unemployed for long periods, could only be described as moving like a defeated and dispirited army, with drooping shoulders and slouching feet. Most of them had left school at 14; many had had a series of blind-alley jobs and found themselves "too old at 21." The majority continued to live on sufferance in their parents' homes and had little independence "except on the street corner." About 80 per cent. attended the cinema at least once a week; some were "dancing mad"; and others found escape from reality by the constant reading of detective stories. Apart from going to the cinema, they seemed to spend most of their time "walking about." They had little sense of time or purpose. As one of them expressed it: "It's like as if you were dead." Only a very few joined educational associations or political organizations. The majority neither went to classes on weekdays nor to places of worship on Sundays. "What does it matter, anyway?" one of them asked. Apathy, and not rebellion, was the keynote of their attitude to their con-

¹ Edited by C. Cameron, 1943.

dition. Indeed, it is impossible to escape the conclusion that continued unemployment during youth and early maturity is a frustration of normal development and destroys the life-plan of the individual.

Not only does youth need work but modern industries need the trained creativeness of youth in order to maintain their markets and develop their services to the world-community. Other highly industrialized nations have already realized this truth. For example, since the early years of this century Germany has had a well-organized system of compulsory continued training for youth after entrance into industry. Similarly, in most of the cantons of Switzerland there has for years been provision for compulsory attendance at continuation schools during the first years of the individual's working life. In Denmark, much has been done after school days to kindle intelligent interest in co-operative methods in agriculture and in problems of citizenship. Since the revolution Russia has also fully realized the importance of technical and vocational training in and for an industrialized society. She has therefore not only developed factory apprentice schools for boys and girls on entrance into industry, but has also emphasized "polytechnization" throughout her whole educational system.

It would therefore seem that for the further development of a highly industrialized society as well as for the harmonious growth of individuals, there must in the future be a closer partnership between education and industry (including commerce and agriculture). Educationists alone cannot solve the problem of ensuring fullness of life for all individuals. Industrialists alone cannot solve the problem of maintaining and developing industries by the continued improvement of technological processes and managerial methods. They must both be willing to come together for the good of individuals and of society.

No doubt closer co-operation between education and industry will necessitate modifications on both sides, especially modifications in outlook. For example, at all stages of education there will need to be a fuller recognition of the value of skills, as well as of knowledge, both for the individual and for modern society. At the secondary stage of education there should not only be developed a system of scientific *educational* guidance, so that curricula and methods may be adjusted to the needs and aptitudes of individuals, but this should lead progressively to an adequate system of *vocational* guidance. The transition from school to work should not be a paralysing shock to the adolescent, but should be effected smoothly by part-time continued education after work has begun and until the period of critical growth is ended. There should also be better provision for technical education at later stages of development to meet the needs of individuals and of industry.

On the side of industry there will need to be control of the profit-making motive and a clearer recognition that industry is made for man and not man for industry. The age of entry into industry should consequently be determined by scientific evidence concerning the development of individuals and not by a desire for cheap labour. Since blind-alley occupations are inconsistent with the growing-up process, it is doubtful whether they should be tolerated, at least for individuals during the growing period of life. Suitable employment, opportunities for promotion and adventures are even more necessary for the young and vigorous than is social security. Industry should therefore both encourage the ambitious to seek further training and also endeavour to find new ways of bringing a sense of satisfaction and contentment into the lives of those workers who have little prospect of great material advancement.

The provision in the Butler Act for the setting-up of county colleges offers a great opportunity for education and industry to co-operate in the service of youth and of an industrialized society. While it will be the duty of the Local Education Authorities to establish and maintain county colleges, all firms, businesses, farms and homes employing young people will need to make adjustments in order to release their young employees for part-time attendance at these institutions, and these adjustments will not always be easy, notwithstanding the flexibility of the arrangements envisaged in the Act. Attendance is to be compulsory for one whole day or two half-days in each of forty-four weeks in every year, or for one continuous period of eight weeks, or two continuous periods of four weeks each, in every year while the individual remains a young person. These colleges are to give such further education, including physical, practical and vocational training, as will enable young persons to develop their various aptitudes and capacities and will prepare them for the responsibilities of citizenship. Obviously this objective will only be reached when education and industry (including commerce and agriculture) co-operate in the working of the scheme; and when employers and trade-union leaders learn to appreciate the needs and potentialities of youth, and teachers and directors of education learn to understand the nature and possibilities of the industries of the area served by the college.

Some valuable experiments in part-time continued education have already been successfully carried out in this country. Progressive employers in various industries, such as Cadbury Bros., Lever Bros., Boots, Tootal Broadhurst Lee Co., Reckitt & Sons, Mather & Platt, either themselves or through neighbouring Local Education Authorities, have experimented with voluntary day-con-

tinuation schools ; and many other firms too numerous to mention have released their junior employees during working hours for attendance at colleges of technology. This provision has not only been beneficial to the employees in respect of their subsequent careers, but the continued educational supervision has undoubtedly had a stabilizing effect on their many-sided development during the critical years of adolescence.

Under the statutory Rugby scheme, which has been in operation since 1920, all young persons between the ages of 14 and 16, not receiving full-time education elsewhere, attend the day-continuation school for one day a week, the day being fixed by the Local Education Authority according to the need for a suitable classification of the pupils and with due regard for the convenience of employers. The curriculum has not been narrowly vocational, but has consisted, in the case of boys engaged in industry, of English, handcrafts, science, physical training, mathematics and drawing ; and in the case of boys engaged in the distributive trades, of English, handcrafts, physical training, commercial arithmetic and book-keeping. The curriculum for the girls has been similarly differentiated according to their dominant commercial or homecraft interests. The pupils attending on the same day each week become a "house," with their own games and social life, and, in addition, may return to pursue voluntary activities in the evenings. School records are frequently considered by employers in cases of prospective promotion, and many apprentice training schemes have developed after the day-continuation school stage. Perhaps the best proof of the value of the experiment is provided by the one fact that about 75 per cent. of the boys and 50 per cent. of the girls continue their education voluntarily, without a break, after they have passed the age of statutory compulsion.

The Service of Youth.—There can be little doubt that had the Fisher Act of 1918 been implemented throughout the country as it was at Rugby, many of the long-standing problems created by the continued neglect of youth would have been solved in the years between the two World Wars. But what actually happened was that the nation shirked its responsibilities both to youth and to the ideals of democracy. Voluntary organizations, such as the Scouts, Guides, Lads' Brigades, Boys' and Girls' Clubs, the Girls' Friendly Society and the Urdd, endeavoured to stem the breach and did very valuable work in training and guiding boys and girls by encouraging them in the right use of their leisure. They, together with the youth organizations in the churches, however, only influenced a small proportion of the adolescent population. Many of their members were already provided for in the secondary schools, and the great majority of adolescents most in need of guidance were outside their spheres of influence. When, therefore, war conditions—the black-out, bombing, evacuation, the early entrance of boys and girls into industry and economic independence, and the absence of fathers on active service and of mothers on war work—increased the risks of disaster to the youth of this country, as was clearly evidenced, for example, by the increase in juvenile delinquency, the Government introduced a war emergency scheme which has come to be known as the "Service of Youth" Movement.

In its Circulars 1486 and 1516, issued in November 1939 and June 1940 respectively, the Board of Education recommended that Local Education Authorities should set up Youth Committees, on which the voluntary youth organizations should be represented, to survey, encourage and co-ordinate youth services in their areas. It also announced that grants made or expenses incurred by Local Education Authorities in respect of such services

would be eligible for 50 per cent. grant from the Board of Education. In Circular 1543, entitled *Youth Service Corps* and issued in March 1941, there was clear evidence of a change of emphasis from the Service of Youth to Service by Youth. Later, in Circular 1577 (December 1941), entitled *Registration of Youth*, Local Education Authorities, through their Youth Committees, were given the task of arranging for the interviewing of boys and girls as they became liable for registration by the Ministry of Labour and National Service. The interviewers were to advise those who came before them to join some youth organization if they were not already members, and in the present war emergency were to encourage boys and girls to undertake some form of pre-Service training.

Many pre-Service organizations, such as Air Training, Army and Sea Cadets, came into existence and, as was to be expected with the continuance of the War and the attraction of uniform, a high proportion of boys joined them in preference to, or in addition to, other youth organizations. Thus, for example, in Monmouthshire, of the boys registering in 1942 and 1943, 34 per cent. joined pre-Service training units and 15.5 per cent. other youth organizations, while 14 per cent. remained at school. Among the girls, only 23.5 per cent. joined youth organizations of any kind, while 12.5 per cent. remained at school.

The comparative failure of the Service of Youth Movement to attract the majority of those whose formal education ends at 14 has been widely noticed and has already led to considerable controversy concerning the advisability of introducing the principle of compulsory membership of youth organizations. This suggestion of compulsion in regard to the use of leisure raises the much larger question of the purpose and ideology of the Service of Youth Movement and of its consequent suitability to

be a permanent and essential element in a democratic system of education.

As a war emergency this scheme for the Service of Youth may not be open to serious objection, but as a long-term policy it certainly requires careful and critical consideration. It has, for example, been criticized by experienced workers in the older voluntary youth organizations, who fear that central support and control may rob the movements of their distinctive characteristics and may discourage the members from making a real effort, as they have done in the past, to provide for their own leisure and to find ways and means of supporting and developing their own organizations.

The wisdom of giving support from public funds to voluntary youth organizations before the minimum basic State provision for the education of youth has been secured has also been questioned by progressive educationists. Even if all boys and girls who leave school at 14 were compelled to become members of youth organizations, the extended provision for recreation and for physical and social training, under the guidance of well-meaning amateurs, would not really meet their basic needs during one of the most critical growing periods of their lives. The psychological facts already outlined point unmistakably to the necessity for many-sided education during youth, for the training of the intellect as well as of the body, for technical training and vocational guidance, and for sex, moral and religious education, as well as for social training. The critical nature of the period of youth suggests also the necessity for professionally trained leaders, who will be able to give guidance not only to the adolescents but also to the parents, whose understanding of their children is probably the most important single factor in preventing maladjustments. Secondary education for all, though in a greater variety

of forms and with more recognition of the need for creative work and self-government than has been usual in the past, followed by at least part-time continued education to the age of 18, should undoubtedly be the foundation of any permanent system for the service of youth. The development of recreational centres and youth clubs, valuable and important as these may prove to be, should be ancillary to, and not a substitute for, this basic provision.

As a supplement to secondary and further education at least to the age of 18, membership of a youth organization may prove useful, especially if there are within it opportunities for the practice of self-government and for the continuance of education beyond the school-leaving age. In the planning of post-war education we must, however, avoid the mistake of supposing that the development of war-emergency youth services has diminished the need for the raising of the school-leaving age, the reorganization and development of new forms of adolescent education and the adequate provision for vocational guidance and vocational training.

The origin of the war-emergency Service of Youth scheme, and particularly its connection with the earlier "Keep Fit" Movement, was perhaps unfortunate. But leaving all questions of origin aside, it is obvious from internal evidence that the purpose of the scheme remains confused, compared, for example, with that of the Hitler Youth Movement.

In Ziemer's *Education for Death* there is a penetrating analysis of the German Youth Movement, which clearly shows that, after it became centralized and membership in it became compulsory, its main purpose was to exploit youth in order to produce an invincible war machine. The leaders set out to encourage physical fitness, toughness and blind obedience to superiors. To this end they

dressed the members in uniforms, drilled and subjected them to a discipline of fear, and made rules for the use of symbols and customs calculated to encourage emotional solidarity. They subjected boys and girls to the persistent influence of propaganda, such as that concerning racial superiority, and taught them to despise the intellect and critical thinking and to repudiate the Christian virtues of mercy and kindness. The youths of Germany were thus separated from their families and were trained and regimented for service to the State.

Such a movement is consistent with and, in a real sense, reflects Fascism. But since the value of the individual is the corner-stone of the democratic view of life, it would hardly seem to be appropriate training for citizenship in a democracy, where each individual is expected to be able to exercise his own judgment on important questions. In addition to learning how to serve his fellows, he has to be educated to think critically and without prejudice. In his case, training in straight thinking during the period of adolescence, when his intelligence matures, is an essential part of education for citizenship. The exploitation for propaganda purposes of the team spirit or *esprit de corps*, which is so marked a characteristic of youth, cannot be justified in a democracy.

It is, of course, true that many of the voluntary organizations co-operating in the Service of Youth scheme were designed to give training in the right use of leisure, and to provide the opportunities for adventure, independence, co-operation, service and religious experience which youth really needs. Voluntary membership within them is therefore entirely consistent with democratic ideals. But the gradual change of emphasis from Service of Youth to Service by Youth, indicated, for example, by a careful comparison of the first two circulars of the Board of Education on the subject, in which there is no mention

of pre-Service training, and the later statements of policy in which the Services as well as the voluntary youth organizations appear to be partners in the training of youth, cannot fail to raise the question in the minds of true democrats: "How far has the scheme, if only because of its origin and development during a period of war, been infected by an ideology inconsistent with democratic ideals?"

The development of Army, Navy and Air Force pre-Service training units for boys, the gradual lowering of the age of admission to the Army and Sea Cadets, the formation of the Girls' Training Corps and the threat of compulsion in regard to membership of a youth organization undoubtedly have a totalitarian flavour. If in this country the right of conscientious objection to war service has to be conceded to adults, it would only be consistent to hold that there should be no forcing of immature judgment during a period of marked instability and no indirect violation of the principle of individual freedom. It should be remembered that the recognition of the right of private judgment is based on the view that there is a moral law within each individual higher than the laws of State. One of the major adjustments of youth is the discovery of this moral law; and the effect of early pre-Service training on this development has not yet been sufficiently considered by psychologists and sociologists. One point, however, is clear, namely, that the attainment of the objective of the Allied Nations described in the eighth clause of the Atlantic Charter as "the abandonment of the use of force and the outlawry of war" will necessitate a new alignment of the Service of Youth Movement or, at least, of that part of it which is at present concerned with preparation for war service and is aided and partially controlled by War Ministries.

It is perhaps necessary to draw a clear distinction

between *education* (training for the free and many-sided development of the individual) and training for *exploitation*—that is, for the use of the individual by other interests. In a democracy, where the value of the individual and his right to creative growth are accepted basic principles, there should be compulsory *education*, but no training for *exploitation* during infancy, childhood and early youth. Ideally, no one should be denied full opportunities for many-sided development up to the end of the third period of rapid growth, either by the omissions or the commissions of the State; and even up to 18, individuals should be regarded primarily as persons to be educated rather than as wage-earners or servants of the State. The kind of education given should vary according to individual interests and abilities, but there should be a general principle governing the varieties of provision, namely, that in youth each individual should be prepared for the four major adjustments of the growing-up process. There will be need for vocational guidance and training, and in some cases it may be advisable for there to be part-time employment before the age of 18. But there will also be need for sex education, for education for citizenship and for moral and religious education. The methods of learning employed will need to give scope to the spirit of adventure and creativeness in youth, as well as to give knowledge of the real world and that training in critical thinking which is so essential for citizens of a democracy. The kind of discipline used will also need to be appropriate to the period of youth when there is, or should be, a gradual transition from a morality of constraint and obedience to a morality of insight and co-operation.

When there is adequate provision in this country for full-time or part-time compulsory education up to 18, the problem of the integration of the Service of Youth Move-

ment with this extended educational provision will need careful consideration. There appears to be no reason why county colleges, suitably designed, with canteens and other club facilities, should not provide accommodation in the evenings for the meetings of various youth groups. In a sense, the voluntary principle should be applied, without exception, to all arrangements for the use of leisure by young people, whether in the extra-curricular activities of the county college or in membership of other youth organizations. Something of value in the existing youth movement will be lost if Local Education Authorities and the staffs of county colleges do not clearly realize the needs of young people for independence and self-government. Much may be gained if leaders of voluntary youth organizations, through more adequate training and closer co-operation with teachers, learn to respect the integrity of the minds of adolescents and to resist the temptation to use their organizations for the furtherance of "causes" which they themselves hold dear.

When the proposed extensions of adolescent education mature, voluntary youth organizations may still be helpful in guiding young people in the use of their leisure and in supplementing the more formal provision. Their work will tend to shift in respect of age-range, and after a period of transition will probably become mainly one of bridging the gap between compulsory adolescent education and voluntary adult education.

NOTES ON FURTHER READING

The report on *Continuation Schools in England and Elsewhere*, edited by Sir Michael Sadler (Manchester University Press, 1907), is a surprisingly up-to-date statement of the place of part-time continued education in the educational system of an industrial and commercial society. *Day Continuation Schools*, by R. W. Ferguson and A. Abbott (Publications Department, Bournville, 1935), contains an interesting and detailed descrip-

tion of the first voluntary day continuation school in this country—namely, that associated with Messrs. Cadbury Bros. at Bournville—as well as an account of other similar schools associated with industrial concerns. It also includes a chapter, written by the headmaster, on the Rugby statutory day continuation school.

Dr. A. E. Morgan's book, entitled *The Needs of Youth* (Oxford University Press, 1939), has been influential in concentrating the attention of the nation on the many and varied problems of youth, both in regard to employment and leisure.

Lord Baden-Powell's *Scouting for Boys* (18th edition, 1937) is still an inspiration to all concerned with the leisure activities of youth. Mr. B. L. Q. Henriques' *Club Leadership* (Oxford University Press, 1933) is a useful exposition of the aims and methods of the Boys' Club Movement. Mr. H. Stovin's *Totem : the Exploitation of Youth* (Methuen, 1935) is a severely critical consideration of the principles and practices of typical youth movements, and serves as a reminder of the dangers of the exploitation of youth.

CHAPTER XI

THE PROBLEM OF THE CURRICULUM

IN planning *secondary education for all* it will of course be necessary to have widely varied curricula to suit the great range of abilities and aptitudes found among the pupils, whether this differentiation be effected in separate schools or in sides of one school. But before considering the problem of differentiation, it will be necessary to examine critically the traditional secondary school curriculum and to consider the principles that should determine the common core or the essential elements of the curriculum suitable to the period of early adolescence.

The Basic Curriculum.—The secondary school curriculum has often been stated to be over-crowded, over-intellectualized, lacking in meaning and purpose, subject-rather than child-centred, sterile and largely irrelevant to modern needs. The metaphor that springs to one's mind is that of the salvage-dump—an accumulation of bits and pieces, of subjects and techniques, that have been of use in the past, but now lie disorganized awaiting reintegration in accordance with the needs of a new era. Nowhere have the criticisms been more far-reaching than among progressive secondary school teachers, whose persistent desires for reform have been largely frustrated by the existing examination system.

The Norwood Report ¹ has undoubtedly made an outstanding contribution in the direction of reform by recommending a change in the examination system which, if implemented, will provide secondary school teachers

¹ *Curriculum and Examinations in Secondary Schools*, H.M.S.O., 1943.

with new opportunities for educational experiment. The reform of the curriculum will probably need to be far more radical than is suggested in Part III of that Report, which, indeed, in its timidity, presents a curious contrast to the boldness of the recommendations concerning the examination system. To accept the division into traditional subjects of study, or even to re-examine the claims of particular subjects for inclusion, and perhaps to add one or eliminate another, leaves the main problem unsolved. The curriculum may still remain a salvage-dump, lacking in purpose and disintegrated in character.

No doubt many varied experiments will have to be tried out before working solutions of the problem of the reform of the secondary school curriculum will be reached, but there are certain general educational principles that can be a guide in the planning of the necessary experiments. In the first place, the curriculum should be child-centred, that is, should start from the existing interests and needs of the individual and should minister to his many-sided growth. In the first stage of education this principle is already largely operative. The nursery school provides an appropriate environment for the satisfaction of the basic needs of young children. Each individual selects from the opportunities provided those which minister to his creative development. His activities therefore seem to him to be full of meaning. There is no divorce of the training of the body from that of the mind or of the character: there is no artificial division into subjects of instruction. Indeed, though knowledge is a natural by-product of the educational process, the emphasis is not placed on learning and instruction, but on growth and living.

Admittedly the problem of the integration of the curriculum is more difficult to solve at the secondary, than at the nursery, school stage. Life is more complex

in youth than in infancy. The individual's interests are more numerous and conflicting, and his purposes, though wider in range, are often still unsure. But this makes it all the more necessary for the right options to be offered, so that the education of each individual may spring from his real interests and be related to his developing purposes. It is not difficult in secondary schools to find examples where boredom with traditional subjects of study has had disastrous effects, not only on the intellectual but also on other aspects of development. According to a recent American investigation,¹ the subject in which the greatest proportion of High School pupils lost interest was Latin; and more than 20 per cent. of these explicitly attributed their loss of interest to failure to see the need for its study. Conversely, the stimulating effect on many-sided growth of the pursuit of a purpose, clearly conceived by the individual, has been abundantly proved by such educational experiments as the Scout Movement, the Community of Service Movement in schools like Bryanston, Bishop Wordsworth's (Salisbury) and Gordonstoun, and indeed by the extra-curricular activities of the great majority of secondary schools. The recent success of pre-Service training units is also significant, not because they ought to be a permanent feature of school life, but rather because they have revealed the integrating nature of a purpose, clearly conceived by the individual, and the possibilities of many-sided growth that result from its pursuit.

The Norwood Report pays lip-service to the principle of the child-centred curriculum, but it ignores the scientific evidence that has accumulated in recent years concerning the characteristic developments of the period of youth, and is therefore vague in its application of this

¹ F. M. Young: *Journal of Educational Research*, 1932.

principle to the reform of the secondary school curriculum. The relevant facts, which have already been reviewed,¹ clearly indicate the main lines of growth during the years between 11 + and 16. There is rapid growth of body and there are profound physiological changes associated with the maturing of sex functions. There is continued growth of general intelligence, as measured by intelligence tests; there are frequently new intellectual interests, both literary and scientific, and increasing powers of appreciation and abstraction. The characteristic emotional changes, which may mean a transfiguration of character, are associated with the beginnings of four major life-adjustments. There is first an increased need for psychological independence, associated with the first great adjustment—the finding of a vocation. Secondly, there is an increased interest in the opposite sex, foreshadowing another adjustment—the finding of a mate. Thirdly, there are new social emotions, preparing the individual to assume the responsibilities of citizenship. Then there are also new or intensified æsthetic and religious emotions, the prelude to the fourth great adjustment—the finding by the individual of a religion, a moral code or a working philosophy of life.

Even more unfortunate than the ignoring of the relevant psychological evidence is the implicit denial in the Norwood Report of the second principle that should guide us in the reform of the secondary school curriculum. It is not only the needs of the pupils and the stage of development at which they have arrived that must be considered, but also the nature of the society of which they are to be members. They have a social heritage; they have to live in the modern world; and they should be educated to contribute to that heritage and to be adjusted to that world. It is therefore necessary that the basic

secondary school curriculum should be planned, not only to meet the common needs of adolescents, but also to aid them to adjust themselves to a new era in human history.

Although there should be options and additions, according to the varying interests and abilities of individuals, the essential elements to be provided in all types or sides of secondary schools seem to be roughly indicated by the application of these two principles. First, there should be health education, involving not only the acquiring of skill in the management of the body but also of knowledge of the conditions of bodily health and of sex functions. Secondly, there should be training in thinking and in the clear expression of thought both in language and in other media, such as scientific experiments, symbolic representations or practical constructions, which are increasingly important for adjustment to a scientific and technological age. Thirdly, while education at this stage should always be for the *whole* individual, there should be vocational guidance, and towards the end of the secondary stage some adjustment of the curriculum to suit vocational purposes. In the case of pupils leaving school for work at 15 or 16, there should be some opportunity in school for a try-out of different jobs, or at least for the study of the chief local and national industries through visits, films and talks. Fourthly, there will need to be social training, suitable for future citizens of a democracy. This will not only involve literary and social studies, varying in depth and extent according to the abilities of the pupils, but will also necessitate opportunities for team games and group work, for service to the school and to the outside community. There must also be æsthetic education, involving the appreciation of beauty in various forms and its expression in some chosen medium. Lastly, there should be moral and religious education.

Where then are all the other subjects—Mathematics, Physics, Chemistry, Latin, Greek and French—which figure in the traditional curriculum of the existing secondary school? It should be clearly realized that the basic curriculum is naturally adapted to adolescents of relatively low ability, for whose continued education provision is beginning to be made. The history of secondary education in the past has constantly revealed the dangers of an over-burdened curriculum, even for pupils of relatively high intelligence. Boys and girls have learned so many smatterings of this and that, that they have left their secondary school with mental indigestion, with little standard of scholarship and less power of independent thought. This danger of an over-burdened curriculum is even greater when provision is being made, not only for selected groups who pass entrance scholarship examinations and whose abilities may therefore be presumed to be above the average, but for all adolescents, including those whose ability is below the average. For the latter group, the basic curriculum will probably be found sufficient, especially if individual interests are considered and some additional free choice is allowed.

It may be argued, however, that mathematics, or at least arithmetic, should find a place in the basic curriculum because of its practical importance. There are several points to be considered before the minimum should be increased by pressure coming from specialists. In the first place it should be remembered that adolescent education is a second stage following on the education of childhood, where the three R's are naturally important. The ordinary arithmetical rules, as well as the arts of reading and writing, will therefore have already been learned save in exceptional cases. Secondly, just as opportunities for reading and writing will occur without

special provision for them in the time-table, so opportunities for the application of ordinary arithmetical rules should and will be provided in the work in elementary science and in the practice of a craft. In addition, it is doubtful whether the *practical* importance of mathematics is not being over-emphasized. Its disciplinary value to those who are interested is immense ; but its practical value to those who are not interested is not so great as the traditional view might lead one to expect. There are vast numbers of leaders of thought, business and industry who manage very successfully with a minimum of mathematical knowledge, comparable to that acquired in a junior school. The inclusion of mathematics as a separate group of studies for *all* adolescents does not therefore seem to be necessary, although its practical importance in so many occupations will naturally make it one of the variables most frequently added to the basic curriculum.

Obviously there is some overlapping between the essential elements of the basic curriculum, but at least they serve to indicate possible lines for the grouping of related subjects, by which the problem of the overcrowded grammar school curriculum may be solved. For example, the teaching of *general* science would seem to be indicated as appropriate to this stage ; and only later, in the case of pupils whose interests tend to be scientific, should specialization in physics, chemistry, botany, zoology and other sciences begin. Similarly, as Happold¹ has shown, the social group should combine history, geography, economics and sociology, so that the pupils gain a clear picture, in outline, of the world in which they are going to live. This should be related to a practical training in co-operation and service in the school com-

¹ F. C. Happold : *Approach to History*, 1928 ; *Towards a New Aristocracy*, 1943.

munity. In the case of girls the social group might emphasize domestic and civic studies, thus bringing meaning and purpose into the routine practice of domestic crafts.

By comparison with these essentials, the traditional grammar school curriculum not only seems to be overcrowded but also to have too great a bias towards verbalism, and consequently to be ill-adjusted to a scientific and technological age. It also does less than justice to the emotional needs of adolescents. The logical structure of learning has been recognized, but rhythm and harmony, which, in Plato's view, constitute the principle of the coherence of the Universe, have been largely ignored.

Plato's argument that æsthetic (or as he terms it, musical) education is of supreme importance "because rhythm and harmony sink most deeply into the recesses of the soul and take most powerful hold of it, bringing gracefulness in their train, and making a man graceful if he be rightly nurtured, but if not, the reverse; and also because he that has been duly nurtured therein will have the keenest eye for defects, whether in the failures of art, or the misgrowths of nature; and feeling a most just disdain for them, will commend beautiful objects, and gladly receive them into his soul, and feed upon them, and grow to be noble and good; whereas he will rightly censure and hate all repulsive objects, even in his childhood, before he is able to be reasoned with; and when reason comes, he will welcome her most cordially who can recognize her by the instinct of relationship and because he has been thus nurtured" ¹ is curiously in line with modern psychological discoveries concerning instinct and the unconscious.

Mr. Herbert Read's extensive studies in the psychology

¹ *The Republic of Plato*, tr. J. L. Davies and D. J. Vaughan, 1904, p. 97.

of Art have led him to adopt the position that æsthetic education is essential for the integration of personality, and that without it reconciliation of individual uniqueness with social unity cannot be achieved. His recent book, *Education through Art*, is perhaps an overstatement of the claims of Art, due partly to his very broad interpretation of the term Art and partly to his failure to recognize the importance of training in conceptual and abstract thought. But in view of the bias towards linguistic studies which is so marked a feature of the secondary school curriculum, an overstatement of the claims of Art may prove useful for attaining a correct balance.

Moral and religious education are of vital importance, not only for the well-being of individual adolescents, but also for the survival and enhancement of modern civilization. They should not, however, be regarded as "subjects" in the curriculum so much as an orientation of the whole curriculum, discipline and methods of the school towards an ultimate purpose. They therefore merit consideration in a separate chapter after problems of discipline and methods of teaching have been reviewed.

Differentiation of the Curriculum.—The psychological facts concerning resemblances and differences between adolescents, reviewed in Chapters V and VI, suggest that about twenty-five per cent. of the pupils for whom provision will need to be made in the future will be sufficiently above the average in intelligence to justify a considerable addition of studies or occupations to the basic curriculum. They are the pupils who on the three-fold division of schools would be sent to grammar and technical high schools; and they are generally capable of reaching an all-round standard, such as used to be required in the school certificate examination. There is therefore no objection to their having a common curriculum, wider and heavier than the basic curriculum and

including mathematics and a second language, until their varying interests can be clearly distinguished. In course of time, by the use of aptitude tests and by the consideration of their achievement in the various studies being pursued, some will be revealed as having special aptitudes and interests in linguistic, mathematical or scientific studies, and others in arts, crafts and techniques and the applied sciences to which these are related. There should then be differentiation of the curriculum to suit these variations ; but the important point to notice is that the special aptitudes do not reveal themselves at 11 +, or even at 13, but only gradually and progressively. The necessary adjustments can therefore be more easily and more appropriately made if the pupils are in one school rather than in two separate schools.

Assuming that special provision is made for mentally defective children, there remain nearly three-quarters of the total age-group who are either of average, or somewhat less than average, intelligence. The main difference between these pupils and those with high intelligence lies in their lower capacity for abstract thinking, and shows itself in the smaller range and complexity of the problems which can be tackled and in the slower speed at which tasks can be successfully accomplished. These pupils need a much simpler, more limited and less abstract curriculum than is appropriate for children of more than average intelligence. Indeed, a common curriculum for all in the first two years of the secondary stage, as was recommended in the Norwood Report, is psychologically undesirable and practically impossible. Because of the marked difference in powers of abstraction, whatever force there was in the argument that the " subjects " of the grammar school curriculum should be grouped round dominant interests and clearly conceived purposes is multiplied a hundredfold in regard to these pupils. For

example, an organized expedition to see some place of historic interest, preceded and followed by discussion and expression work, is much more likely to lead to the development of linguistic, historical and geographical interests than the separate study of English, history and geography. Yet even the Scottish Council for Research in Education set about investigating the curriculum for such pupils by appointing panels of investigators in the separate subjects, English, history, geography and the rest.¹

Within the large group of pupils of average, or less than average, intelligence, there are of course wide variations of ability, so that it has become customary to have three streams in the senior schools to which in recent years such pupils have been sent. A number of experiments have been tried out in regard to this three-stream organization, some schools using tests of intelligence and of achievement in the primary school subjects as the criteria of differentiation, and others experimenting with grading according to dominant abilities in linguistic, mathematical or craft studies. The outstanding difficulty in regard to these experiments in differentiation is that, owing to the relative slowness of development of the pupils and to the absurdly short courses in senior schools, the children leave school before the effects of the differentiations are clearly indicated. Dr. Earle's researches in regard to such pupils, in a multilateral secondary school, are particularly illuminating.² They justify the general conclusion that at least in regard to children of less than average ability the main incentive should be vocational, and constructive activities should dominate the curriculum. They also serve to show the need for the

¹ Scottish Council for Research in Education: *Curriculum for Pupils of Twelve to Fifteen Years*, 1931.

² F. M. Earle: *Reconstruction in the Secondary School*, 1943.

continuous study of individuals and for a well-planned system of educational and vocational guidance at the secondary stage of education.

The question of the differentiation of the curriculum for boys and girls perhaps needs special consideration. It has been shown, in Chapter VI, that the range of variations in general intelligence is practically identical in the two sexes, though there are relatively fewer girls than boys both at the higher and the lower ends of the range. The basic curriculum should be common to both boys and girls ; and it should not be assumed either that girls do not need training in critical thought or that boys can do without the æsthetic element in education. There will probably be relatively fewer girls than boys who should be tackling the more ambitious curriculum previously outlined, but neither girls nor boys of outstanding ability should be debarred from any option because of the outworn hypothesis of a sex type.

There should be differences in the physical education of boys and girls ; and because of the strong vocational incentive towards home-making in many girls, the choice of the particular craft to be pursued may tend to be different. But the " domesticity " ideal of girls' education should not be over-emphasized, especially in these days when the position of women in industry, commerce and the professions, and in society generally, is changing so extensively and when even the task of home-making is becoming so different from what it was before the development of modern science.

Sanderson of Oundle believed that, if sufficient freedom of choice of occupation were given, the *dull* boy would be proved not to exist ; and it is certain that many an individual whose average intelligence might appear to be low can do one thing supremely well. The finding of this one thing, which will bring a sense of achievement

and self-respect to the individual and may therefore have a far-reaching effect on his development, is, indeed, one of the most important functions of the true educator ; and when the sizes of classes are reduced, the chances of a teacher's success in this direction will be considerably increased.

An improved staffing ratio, especially for the less intelligent children, would seem to be a necessary preliminary to the solution of the problem of the differentiation of the curriculum. It is, indeed, no exaggeration to say that a reduction in the size of classes is the most important single reform needed in the educational system of this country. It is especially needed in the senior (or modern) schools and in the corresponding sides of multi-lateral secondary schools, where individual attention on the part of the teacher may make all the difference between success or failure for the pupil. The greater use of form-masters and form-mistresses, who can learn to know and understand each individual in the group, is especially desirable with children of only average or less than average ability. Yet so often in the present senior schools these pupils are hurried and flurried from one specialist to another, until they give up the whole educational venture as hopeless. It is idle for theorists to talk of a child-centred curriculum, or, indeed, of education for democracy, until the sizes of classes have been reduced and teachers have ceased to be compelled to adopt mass methods of instruction, methods which in effect deny the intrinsic value of the individual, the very corner-stone of the democratic view of life.

NOTES ON FURTHER READING

The Report on *Secondary Education, with special reference to Grammar Schools and Technical High Schools* (H.M.S.O., 1938), and the Report on *Curriculum and Examinations in Secondary Schools* (H.M.S.O., 1943) are publications of outstanding import-

ance in regard to the secondary school curriculum for pupils of high ability. Relatively little has been written so far in regard to the kind of curriculum suitable for senior (or modern) school pupils, but *The Extra Year* (University of London Press, 1938), which is a report of a joint committee of investigation representing the Association of Education Committees and the National Union of Teachers, collects opinions and gives valuable information concerning the ways in which the extra year of schooling, from 14 to 15, could be most appropriately utilized.

The Interim Report of the Council for Curriculum Reform, published under the title *The Content of Education* (University of London Press, 1945), contains proposals for a drastic reform of the school curriculum. Its most distinctive feature is that it endeavours to view the curriculum as continuous throughout the successive stages of education.

In his book entitled *Reconstruction in the Secondary School* (University of London Press, 1944), to which reference is made in the text, Dr. Earle gives an illuminating account of his detailed study of the pupils of a multilateral secondary school and of the differentiations of curriculum which in his opinion seem to be indicated as appropriate for the various groups distinguished.

CHAPTER XII

THE PROBLEM OF DISCIPLINE DURING ADOLESCENCE

THE consideration of some of the delinquencies of adolescents has revealed certain principles that are important for the *prevention*, which after all is better than the *cure*, of maladjustments. The accession of energy characteristic of the period may result in a temporary lack of control of some instinct ; and if this occurs, it is no use pretending that the primitive impulse does not exist. The adoption of such an ostrich-like policy may but help to turn a difficulty of control into a repression, a more insidious failure of development. Re-direction, and not negation, is the key to the discipline of adolescents. For example, Stanley Q.¹ might have been helped in the early stages of his maladjustment by the provision of legitimate opportunities for the expression of his love of wandering and of adventure. A freer open-air life, a holiday abroad with understanding parents, or membership of a Boy Scout troupe or a school-boys' camp, so that he would have had companions in adventurous explorations and would thus have been disciplined by his relationship to a social group, might have saved him from disaster.

The genius of Lord Baden-Powell of Gilwell led him to realize and to embody in practice the most fundamental principle of good discipline, namely, that the very dynamic impulses, which might cause trouble between young boys and adult society, should be directed and used for their education. What adolescents need is a simpler kind of society in which to learn to control their

¹ See pp. 84-5.

instincts and to try out their powers. Their natural love of adventure, their tendencies to wander, their need to construct and create with their hands as well as with their minds, their instinct of self-display and their growing social impulses can all find legitimate avenues of expression in the organization of which he was the founder. Instead, then, of the herd instinct expressing itself in the formation of such gangs as have been troublesome to adult society from time to time, such as the Hell Hounds, the Black Hand League and the Belt and Pistol Club, the names of which are sufficiently indicative of their nature, it has frequently been directed by Scout and similar youth organizations into socially useful channels. Not only may there be a negative result—the prevention of outbursts of burglaries and street fights—but there may also be a positive discipline of each individual who becomes a member of a legitimate social group.

The newer kinds of secondary schools and the county colleges, delivered from an over-intellectualist tradition, have a marvellous opportunity for embodying in themselves the ideals of discipline which are appropriate for future citizens of a democracy and which have so far been mainly expressed in voluntary organizations. They must start with the recognition of the growing power and independence of adolescents and of their strong social impulses. Whatever may be true of children who, it is sometimes claimed, take kindly to external authority when they are in the habit-forming stage of life, there can be no doubt that with adolescents the only discipline that is appropriate rests on a recognition of their independence and their strong sociability. They need freedom ; but not freedom as conceived of by Rousseau in his description of the education of the boy Emile. Emile was to be brought up alone by a tutor ; he was never to be taught anything until he expressed a wish to learn it ;

he was to be free to develop according to nature. What Rousseau did not realize was that a boy who is denied the companionship of other boys and girls and is not provided with opportunities for co-operation and service is neither free nor being educated for freedom ; for the social side of his nature, which becomes more important in youth, is being consistently repressed. It will be remembered that, according to Piaget, there is usually at this period of life a natural development from a morality of obedience to a morality of co-operation.¹ The freedom that is appropriate for adolescents is therefore that kind of social freedom that is possible through membership of a vitally organized group. This may sound a contradiction in terms until it is remembered that the social instincts are just as much a part of the inheritance of an individual as are the egoistic impulses, and consequently the adolescent can never be free until he has learned to co-operate with his fellows.

What, then, is meant by a vitally organized group ? Mr. Homer Lane's Little Commonwealth for delinquents is one of the best-known examples of a self-governing juvenile community. On arriving at a farm in Dorsetshire to which they were sent to be re-educated, young boys and girls were given almost complete freedom to govern themselves. They lived as a self-contained community, working on the farm for their living, receiving payment for their work, and shouldering responsibilities for the upkeep of the Commonwealth. If any one of their number did not work, he was a burden to the rest of the community. They made their own laws and administered them. Mr. Homer Lane acted throughout on the belief that, given freedom and social responsibility, even delinquents would learn to control their powerful instincts, and would eventually re-educate themselves.

¹ See pp. 42-3.

The partial success of his experiment is proof of the value of freedom in education : its partial failure suggests that curative treatment or more guidance by adults is necessary, at least in certain cases. The educators must be real members of the organized group as well as the adolescents : and as such they must play their part in forming public opinion. Mr. Lane tended to encourage the staff, and to try himself, to remain psychologically outside the group. He realized the tremendous danger that exists when the adult imposes his views on the group and obtains outward obedience, without there being that inner discipline which alone results in the moral improvement of the individual. In order to avoid this danger it does not, however, seem to be necessary that the educator should remain outside the group, but only that the group, including the adult or adults, should be vitally and not mechanically organized.

The Prussian kind of discipline, which results in a school or group appearing to have a regular formation and a military precision of action, is entirely inappropriate for the future citizens of a democracy. Living children should never be treated as though they are things obeying laws mechanically, and with no power to initiate behaviour on their own. Even if, during childhood, they give exactly what is demanded of them without demur, they would be almost certain to rebel during adolescence ; in any case, such treatment would not help in the fundamental process of the socializing of the self which should be taking place at this stage. Membership in a vitally organized group, consideration of the moral code accepted by the adult members of the group, and discipline self-imposed through loyalty to the group are what the adolescent needs most of all. Repressive or excessive authority defeats its own ends. The adult who uses it may obtain outward obedience, but he is put outside the group, and

therefore has little influence on its moral evolution, except in the opposite direction of encouraging secret, and possibly more objectionable, expressions of the impulse outwardly prohibited. He is up against the pupils, and his commands, even when outwardly obeyed, have the effect of encouraging a double standard of action, the boys and girls merely waiting their chance to get their own back.

If the group is to be vitally organized, the adult cannot be a dictator, but only a kind of elder brother ; for every member must feel himself or herself to be in some degree responsible for the well-being of the whole. Prefect systems, patrol systems for certain work, organized games, group marks and prizes, form courts and school parliaments are useful devices for helping individuals to feel their social responsibilities. The pity is that a device which is only a part of the group organization is sometimes so successful that it is mistaken for the life of the group itself and so becomes an impediment to further progress. Instead, therefore, of advocating one such device, which might lead to mechanization, it is far better to start with a clear view of the meaning of discipline as applied to adolescents, and to expect a rich variety of methods of social organization in the new schools and colleges, one condition only being common to all, namely, that each adolescent should feel himself or herself to be a member of a social group, with a duty to each and all its other members, with something to contribute to its success and with a real responsibility for its good name.

If a school is working on fixed examination syllabuses, it is difficult for the staff to avoid using socially undesirable incentives in order to get the prescribed work done. Indeed, if the curriculum does not fit the pupils—that is, does not centre round their dominant interests—authoritarian discipline on the part of the teachers would seem

to be the only alternative to complete chaos. It is therefore no good recommending the use of freer and more co-operative methods of discipline without at the same time endeavouring to adjust the curriculum to the individuals.

In the matter of discipline the Little Commonwealth had one obvious advantage, as compared with the traditional grammar school, in that co-operative and purposive work on the farm and in the houses was the order of the day. In the majority of grammar schools the best opportunities for co-operation come in games, and the social discipline of co-operative work, as contrasted with co-operative play, is very largely missed. It is to be hoped that in the newer kinds of schools the disciplinary value of handcrafts will be clearly realized from the outset. It has already been pointed out in the consideration of the cases of Nellie Malone and Stanley Q.¹ that one of the most usual maladjustments during adolescence is an excessive tendency to day-dream and a consequent "flight from reality." There is no discipline more effective in correcting this tendency than training in some craft, where there is scope for imagination and yet a constant necessity for translating thought into a material medium, which has its own fixed properties and to which accurate adjustments must be made before it can be successfully used. It is not only true that "Satan finds some mischief still for idle hands to do," but that idle hands in adolescence lead an individual down the primrose path of pleasure-thinking to mental and moral inefficiency. The curative value of handwork has been proved conclusively in the treatment of shell-shock cases, but the educational significance of this fact does not yet seem to have been fully realized.

Not only is the practice of a craft a corrective for

¹ See pp. 83 and 84-5.

excessive day-dreaming and a preparation for the right use of leisure, but it also provides many unparalleled opportunities for co-operative work. Such opportunities may come in any subject rightly taught (as will be shown in the following chapter) ; but the purposiveness of joint work in the production of some beautiful object needed by the school, or in the growth of flowers and vegetables to be used by members of the group, or in the making of cakes and other delicacies to be eaten at the school party, is so self-evident that the dullest members of the group are able to discipline themselves for the fulfilment of the joint aim.

The social training given need not confine itself to the limits of the school group. Adolescents who are learning to practise a craft will desire to make good certain gaps in their homes or in other social groups to which they belong. War work undertaken by many pupils, such as collecting books for the Forces, fruit-picking and harvesting, as well as pre-Service training, brought them into living relations with the national group, and there is no doubt that there are also needs in peace which can be met by the joint efforts of adolescents. These must be seized as opportunity offers, if the one advantage of the older apprenticeship system is not to be lost and the social outlook of adolescents is to be sufficiently broadened.

The problems of the discipline of a group of adolescents cannot be solved without the constant co-operation of their parents. In the consideration of typical cases of delinquency it was shown how misunderstanding by parents or strained emotional relations within the family circle affected adversely the emotional development of children. Whether the professional educator wishes it or not, the fact remains that the home is the chief training ground of the emotions and consequently of character. This is particularly true in the early years, when senti-

ments are being formed and emotional attitudes are being set ; it is also true of adolescence, when new emotions make their appearance and conflicts between loyalties have to be solved. The love of parents and brothers and sisters, the give and take of happy family life, the intimacies only possible in a small natural group, life in an atmosphere of consideration for others and respect for truth, beauty and goodness, these are what are needed for the education of an individual's emotions.

Was the battle of Waterloo won on the playing fields of Eton ? According to modern psychological investigations, such as those of Flügel,¹ it is far more likely to have been won in the family circles of England. More important battles are being won (or lost) every day in the homes of the people. The struggles for industrial peace are not won (or lost) in Trade Union Congresses, or Employers' Conferences, or in the Houses of Parliament. They are decided in part long before that. If the homes of the rich are educating tyrants who are so spoiled that they are even prevented from socializing themselves during adolescence, and if the homes of the poor are educating rebels against society, then when tyrants and rebels meet, what hope is there of industrial peace ?

It is not difficult to understand how disaster can be prepared for in the early years of an individual's life by his being spoiled and therefore never learning to consider anyone except himself, or by repressive discipline which leads him so to fear and hate one or both parents that his attitude to all authority tends to be rebellious. What is not quite so obvious is that misunderstanding by parents of the emotional changes which take place during adolescence may bring another crop of difficulties in the way of the emotional development of the boy or girl. The mother's failure to recognize the growing need for inde-

¹ J. C. Flügel : *The Psycho-Analytic Study of the Family*.

pendence on the part of her boy, or the father's mistake in expecting his son to respond to all the responsibilities of adult life at once, may interfere with the growing-up process. Unhappy relations between the parents may also have far-reaching effects on the children. There are many cases recorded where ill-treatment of the mother by the father has engendered in the mind of the daughter a dislike of men in general, and has therefore robbed her of full emotional development, perhaps even preventing her from marrying. Even when the parents are most conventionally respectable, there is the possibility that their views on sex are so hedged in by primitive taboos that they may fail the awakening adolescent at the crucial moment. Over and over again in the answers to the question on curiosity concerning the facts of life and the sources of its satisfaction (Q. 11), students and workers regretted that they had not been enlightened in regard to sex by their own parents, but had been forced to seek information from their school-fellows, often with disastrous results.

Plato's suggestion, that all children should be taken away from their parents before they have learned to know them and should be given by the State the exact education suited to their abilities, would not be acceptable to modern psychologists. It is now realized in theory that though such a system might result in highly trained intelligences it would also breed emotional cripples. Practice, however, lags behind theory, and many schools are still run as though parents had very little to do with the education of their children. In the matter of discipline their co-operation is obviously invaluable; and in the new schools it would be well to recognize this from the start, both by encouraging parents to come to discuss their children with the teaching staff when the need arises, and by having parents' meetings and perhaps a

parents' committee in connection with each school. A suggestion has recently been made that parents should send reports of their children to the school, just as the school now sends reports to the parents. Anything that reinforces the view that the education of character is a joint task of parents and teachers is to be encouraged ; but personal interviews are much less likely to become perfunctory than written reports. Meetings of parents and teachers for the discussion of the problems of adolescence would be well worth the trouble involved in their organization. A parents' committee, or direct representation of the parents on the governing body or advisory committee of the school, would also be a move in the right direction.

The new schools have new opportunities : they are not yet under the heel of tradition : and if they are staffed with the right kind of teachers, they may not only be instrumental in a great development of adolescent education, but they may also initiate a new movement for the education of parents. It is surely extraordinary that, while there is training for all forms of professional work, sometimes amounting to four, five, or six years, it is not yet customary for adults to prepare in any way for the responsibilities of parenthood. Perhaps it is supposed that the parental instinct is sufficient in itself, but such a belief is as far from the truth as the theory underlying the Platonic system of education. Both rest on a fundamental misunderstanding of the relation between instinct and intelligence in human experience. The mother-instinct is essential but it must not be uninstructed. It provides the motive power which enables the mother to harness her intelligence to the solution of the problems of the upbringing of her children. The father-instinct supplies the urge which enables the father to acquire the knowledge necessary for the fulfilment of his responsi-

bilities. Instinct may drive the father and mother to seek knowledge which will help them to understand their children, but it can never itself be a substitute for the use of intelligence. Impelled by the most powerful of all the instincts, there are many parents who would welcome opportunities for studying the laws of health and of human development, if by that means they could learn to co-operate more effectively in the education of their children. Let the new schools seize their double opportunity to give expression to the growing powers of adolescents and to educate the parents by encouraging them to co-operate in the education of their children.

NOTES ON FURTHER READING

The modern movement towards freedom in education, which finds expression in the Montessori method with young children, has its counterpart in experiments with adolescents, such as the Little Commonwealth (see Homer Lane's *Talks to Parents and Teachers* and E. T. Bazeley's *Homer Lane and the Little Commonwealth*, both published by Allen & Unwin), and that under public school conditions described by J. H. Simpson in *An Adventure in Education* (Sidgwick & Jackson, 1917). The complementary nature of this demand for freedom and for the fuller development of corporate life is recognized by Professor Nunn in *Education : its Data and First Principles* (Arnold, 1920), Ch. 15.

The Home and School Council of Great Britain has published a series of pamphlets of special interest to parents, including one on the period of youth, entitled *Advances in Understanding the Adolescent* (1938).

CHAPTER XIII

METHODS OF TEACHING WITH ADOLESCENTS

ONE of the most hopeful signs of progress in modern education is the widespread interest and the desire to experiment in methods of teaching. This urge is being felt in every subject and at every stage of education. It is perhaps felt least in the University world, but there is evidence that even there more attention is beginning to be paid to the psychologizing of methods of lecturing and study. The Montessori method, the Dalton plan, the Play Way in education, Project methods, Direct and Heuristic methods, Individual and Group methods are being discussed on every hand and compared with the older methods of class teaching. There are signs of life in educational practice, but there are also evidences of confusion. Perhaps the best way in which such confusion can be overcome and some light be thrown on the methods most appropriate for adolescents is to judge each in relation to the fundamental nature of human individuality and more particularly, in this case, to the changes which are characteristic of adolescence. This, of course, implies an acceptance of the self-evident principle that methods should be psychological rather than logical, starting from the interests, abilities and knowledge of the learners, rather than from the more complete, systematized knowledge which is the heritage of the work, it may be, of countless generations of adults.

One of the most significant characteristics of the adolescent is his or her rapidity of growth, both of body and of mind. It is doubtful whether even physical growth can be explained without the assumption of a power

of creation at work within the individual. Vitalistic biologists believe that the hypothesis that some directive principle making for wholeness is at work in every living organism is the only one that explains all the facts of growth, regeneration and reproduction. In the case of the mind there is less room for doubt: there is a power of creation at work: there are dynamic impulses which impel the individual to seek new experiences and adventures in the world of thought, as well as in the physical universe. During adolescence there is an accession of life-energy to the individual which reveals itself in many ways, one of the chief of which is an individualization of interests and purposes and a growing independence of thought and judgment.

Opportunities for individual and purposive work should therefore find an important place in the education of adolescents. There is a place for class teaching, but creative and heuristic methods should be emphasized, and considerable freedom be allowed to the individual in the choice, planning and execution of his work. Consider, for example, the teaching of a craft like woodworking. Repetitive work to learn the technical processes should not come first if interest is to be maintained. Each boy should be allowed to choose, within certain limits, what he would like to make and be taught the technical processes in their relation to his purpose. He may waste more wood, and the finished product may not be so near mechanical perfection as it would have been if he had been drilled in the technical processes first, but he will still be interested and will go on determined to acquire the skill necessary for the fuller expression of his purpose. The educational *process* is still unfolding: and that process is more important than its *product*. Drill methods may be suitable to the pre-adolescent stage, but they are not adjusted to the period of youth which is

characterized by marked creativeness and adventurous independence. Boys and girls at this stage will be wonderfully intelligent and painstaking in the attempt to solve a problem or to make an object of their own choosing. If they really desire to mend a clock or to understand a motor-bicycle, to study a particular character in history or to observe birds, to write a play or to make a bookcase, difficulties will not stand in their way. If they are moved by their own interests and purposes, their powers of hard thinking and of application will be tremendously increased ; whereas if they are merely told to carry out an experiment, or to translate a piece of prose, their minds are in grave danger of being paralysed by inert ideas.

The writing of a poem or a play, the keeping of a Nature calendar or a private chap-book, the discovery of scientific facts by experiment, the illustration of a book, the making of a frock, a piece of pottery or an article of furniture to the individual's own design are instances of individual effort to be encouraged. Opportunities for such encouragement could be more readily seized by teachers if there were the kind of grouping of subjects outlined in Chapter XI. In any case, it is a good plan to have at least one afternoon a week when each individual in a school or form can do work of his or her own choosing. Homework should also be so set that there is some possibility of choice in the work to be done, and some opportunity for the planning of the work and the arrangement of the time-table by the individual himself or herself. A modified Dalton plan operating for homework, some systematic classwork in school hours and the use of individual methods by each teacher when possible would seem to be the best compromise for the adolescent, who needs opportunities to express his or her individuality as well as the discipline that comes from systematic work.

One other fact should be borne in mind by the teacher

who wishes to utilize the energy of natural interests and to employ adventurous rather than repetitive methods, and that is the adolescent's love of the open air and of wandering. An expedition to see a watershed, a castle, a gas works or a botanical garden can be used at the appropriate time as a new centre of interest from which individual and creative efforts will radiate. It can also provide an opportunity for the teacher and the group to get to know each other individually. Such personal knowledge is necessary if the educator is to be able to suggest the lines along which original efforts might proceed in any individual case ; for the best creative work is seldom done by pupils who have a common assignment of work made to them, but rather by those who are so intimately known to their teacher that the suggestions for work made to each are such as to utilize the full drive of the individual's interests.

The Scout and Guide movements take full note of this love of wandering and camping in the open air. They also recognize the need for boys and girls to find their recreation along lines of their own choosing. They have therefore successfully used a system of badges, which may be awarded for proficiency in one or more of a large number of alternative activities. Public schools like Bryanston and Gordonstoun have used similar methods for giving their pupils a wide choice of out-of-door activities and opportunities for service ; and recently a County Badge scheme, based on the experiments at Gordonstoun, has been tried out in some senior schools and youth clubs. This scheme has been widely criticized for its over-emphasis on physical prowess, but in a modified form it could be used to give a sense of achievement to individuals of varying interests and capacities, by encouraging them to reach a standard in projects and services of their own choosing.

Not only do the individualistic impulses receive a great accession of energy during adolescence, but the social instincts are also either awakened or reinforced. There is a greater desire than during childhood to have team games and group occupations, to go about in gangs and companies. As has been shown, adolescence is pre-eminently the period of adjustments to society.

Group methods are therefore important in the teaching of adolescents as well as individual methods. At first sight it might appear as though this were a contradiction in terms, but the consideration of an example will serve to show that creative and co-operative methods of teaching are complementary rather than contradictory. The production of a play and the representation of a historical tableau are typical examples of group work of educational value. Yet both give opportunities also for original work. The interpretation of each part, the making of each dress or the production of any single property may be an individual's responsibility and give him or her scope for creative activity. Yet each individual is creating in the service of a group. The co-operation may be extended to include other groups ; for the literature class that is responsible for the play may seek the aid of an art group for the painting of the scenery, and of the physics specialists for the production of lighting effects. The making of the scenery will itself provide opportunities for individual creation and for co-operative effort ; and each individual member of each sub-group is inspired to greater efforts by the consciousness that he or she is part of a social group which is engaged on a bigger task than anything that could have been attempted by an individual.

Adolescents do their best work when they are moved both by individual and social impulses. They revel in team games and group contests. Even work in which the majority of them are not interested will be tackled

with spirit if it can be turned into a team contest. The device adopted by some grammar schools of having a "Latin boat-race" periodically, when leaders are chosen and all the boys who learn Latin are selected by them in rotation to form teams for the Latin tests, has been markedly successful in encouraging revision. It is amazing what trouble a boy appointed to be a leader in such a contest will take to ensure that the members of his team are doing the necessary work. He is a harder taskmaster than any member of staff—no excuses are accepted by him—and he is supported by public opinion, so that even the weakest members of his team are influenced to make prodigious efforts not to let their side down.

A good library is indispensable if co-operative methods in the more literary subjects are to be successful. The allotting of different aspects of a topic to different individuals for special study, which is only possible if there is a good library, is one of the most valuable ways of utilizing individual ability in the service of a group, and also of using social tendencies for the discipline of the individual. A boy, who has exceptional artistic gifts and who is asked to look up and to make sketches of a group of people dressed appropriately and belonging to a particular historical period, will not only learn some history, but by the joy which his talent gives to the group at work on that period will be trained to regard his gifts in the spirit of stewardship. Another boy, who is not at the start particularly interested in the topic assigned to him, may yet realize that the work of the group will be spoiled without his contribution and may therefore make great efforts to complete it.

Much of Sanderson's success at Oundle was due to his realization of the complementary nature of individual and group methods, and of their suitability for adolescents. The Oundle boys had great freedom in regard to

occupations and subjects of study. The options in the curriculum were many and varied; the equipment included a farm, a smithy, an engineering shop and an excellent library, as well as the usual laboratories, gymnasium and art room; and the staff included a biologist, engineer and anthropologist, as well as representatives of all the usual subjects of a grammar school. By having great variety of options Sanderson hoped to find some line of work in which each boy could excel. "We must not cast out our weak ones," he says. "We must find out what kind of work will appeal to each of them. It is our duty so to organize schools that every boy, weak or strong, shall be able to make full use of his faculties."¹ Each boy was to have the chance of expressing his individuality, but he was also to be trained to use his powers in the service of a group. The building of an engine, the parts of which were made by individuals; the holding of a science conversazione in which different boys were responsible for setting up and explaining different experiments; the production of a play; and the joint investigation of a many-sided topic such as, for example, Egypt, which would naturally include the making of a map, possibly a relief map, and various historical, biblical, archæological and anthropological researches are examples of the kind of co-operative work encouraged at Oundle. Sanderson realized the value of the social training in such group work. "Work in schools," he says, "should be conducted for service and not in the ancient spirit of mastery and dominance."²

In existing secondary schools successful school societies, of great variety and of which membership is voluntary, are often run after school hours. There may be dramatic, musical, scientific, archæological and debating societies;

¹ *Sanderson of Oundle*, 1923, *Obiter Dicta* 2.

² *Ibid.*, *Obiter Dicta* 5.

camera, gardening, pet-keeping and hiking clubs. Such extra-curricular activities, especially if organized by the pupils themselves, provide excellent social training ; and there seems no adequate reason why they and similar group activities, chosen by the pupils, should not take place during school hours. The one afternoon a week when, as already suggested, each individual should be allowed to do work of his own choosing might be the occasion for the meeting of these school societies. The varied possibilities of developments in this direction have been worked out in some detail by Mr. G. H. Holroyd in his book, *Education for Leisure*, and his suggestions in regard to the variety and organization of school societies will undoubtedly be of great use to teachers who are determined to make the newer secondary schools efficient instruments of social training suitable for a democracy.

However effectively individual and co-operative methods are used, there will also need to be some class-teaching in order that time may not be wasted. It is, therefore, important to consider what differences are necessary for classwork with adolescents as compared with children.

It is generally agreed that new intellectual interests tend to make their appearance during adolescence, and that towards the middle of the period, in the case of individuals of high intelligence, thinking becomes considerably more abstract and comprehensive than that previously used. If teaching methods are to be adapted to learning processes, this change in the intellectual life of the highly gifted adolescent should be reflected in the methods employed in class-teaching. For example, in geometry, after a period of investigational geometry, when inductive methods are mainly employed, there is usually at about thirteen or fourteen years of age an interest in rational, as distinct from empirical, explana-

tions ; and more formal work can be appropriately begun. Similarly in the sciences, although it is necessary to begin from the interests of the pupils and to allow them to investigate problems which are real to them, there comes a stage when constant references to scientific method are much appreciated and when more rigorous thinking is enjoyed.

At the sixth-form stage, discussions on fallacious reasoning and practice in logical thinking, such as are recommended in Dr. R. H. Thouless' books, *Straight and Crooked Thinking* and *Straight Thinking in War Time*, and in Mr. M. H. Carré's *Does it Follow ?*, will be of great interest to the pupils. It is obviously of first importance that future citizens of a democracy should have such training in critical thought, but it is probable that only the highly intelligent boys and girls are capable of the degree of abstraction involved in the *verbal* exercises recommended. This does not mean that pupils of less intelligence should not be trained in critical thinking, but only that in their case such training should arise out of direct observations and first-hand experiences rather than out of verbal arguments.

Mr. A. J. Jenkinson's investigation¹ of the books read respectively by the pupils in secondary and in the A forms of senior schools showed that the former on an average read more books in their spare time, whereas proportionately more of the latter attended the cinema once and more than once a week. The contrast would probably have been even greater if the comparison had been made between the secondary school pupils and the B and C forms of senior schools.

The experience of teachers in existing senior schools serves as a warning that the success of the extension of secondary education, now contemplated, may be im-

¹ A. J. Jenkinson : *What do Boys and Girls Read ?*, 1940.

erilled by an inappropriate emphasis on *verbal* educational media. Direct observation of Nature and of the immediate environment, the use of the camera, the epidiascope, the cinema and the theatre, and the pursuit of purposive activities are especially appropriate for senior school pupils ; and in their case training in logical thought is more likely to be successful if undertaken in close relationship to these first-hand experiences rather than through reading or listening to broadcasts.

Consider, for example, the domestic arts, cookery, housecraft and laundry-work. Doubts have frequently been expressed concerning the intellectual respectability of these crafts ; and it is becoming a practice in some schools to allow only those girls who fail to make satisfactory progress in academic subjects to take an intensive course in the domestic arts—with most unfortunate results both for the teaching of the subject and for the home life of the nation.

It should be clearly realized at the outset that the fact that a subject involves the acquiring of skill is no argument for, or against, its intellectual respectability. One might even admit with Professor Freeman¹ that " the fundamental and basic process in the development of skill is not the higher form of thought-analysis " (although this has been called in question by Professor Pear²), and yet, if the acquiring of a new form of skill introduces the learner to a whole circle of new ideas and perhaps even throws light on the meaning of life itself, it surely must be ranked as intellectually valuable. It all depends on whether the practical work widens the range of the individual's interests, provides problems to be solved and gives opportunities for relating and reasoning. In regard to the domestic arts this is mainly a question of teaching

¹ F. N. Freeman : *How Children Learn*, 1919.

² T. H. Pear : *Skill in Work and Play*, 1924.

method. Cookery may be taught so that it is largely imitative and repetitive ; but so also might practical chemistry, if a teacher were unintelligent enough to wish to do it. He might prepare the allotropic modifications of sulphur and tell his pupils to imitate his demonstrations, just as the cookery teacher sometimes does in regard to the making of a cake : but in neither case would there be much scope given to the increased intellectual powers of adolescents. The truth is that the methods of teaching the domestic arts in relation to the basic sciences underlying them, thereby giving the learners opportunities for invention, judgment and reasoning, are still somewhat undeveloped. Even less developed are the ways of relating the domestic arts to the social sciences ; and yet the possible cultural value of domestic training can only be assessed by considering the broad interests to which it might lead, and which would include the understanding of some of the laws of physics, chemistry, biology and the social sciences, an insight into the problems of the right upbringing of children, the relation of the home to larger social groups, the ordering of a better society and perhaps even the meaning of life itself. The methods to be adopted for the fulfilment of this broader aim must be worked out by domestic science teachers before the subject can be adapted to, and therefore take its proper place in, adolescent education. The institution of longer courses of training and of degree schemes for intending teachers of domestic science is one step in the right direction, but there will also be need for much pioneer research work on problems of method.

The growing power of intellectual analysis is not the only change characteristic of adolescence which should affect class-teaching methods. The development of the æsthetic emotions and the increase of the powers of appreciation suggest that inspirational methods should

also be employed in the teaching of certain subjects. Music, singing, dancing, art and poetry, for example, should be taught so that they can be enjoyed. The tendency of most teachers of adolescents is to adapt their methods to the greater power of analytic thought, and to forget that the power of appreciation of beauty of form, rhythm and words is also developing. Methods, therefore, tend to be too analytic—there are too many explanations—and enjoyment, which is a more immediate process, tends to be disturbed. For example, a poem which is being studied may be hacked to pieces in such a way that joy in the rhythm and appreciation of the flow of meaning may be hindered¹; or a symphony may be so subjected to analysis by the teacher and there may be so many interruptions for verbal explanations, that barriers may be raised between the minds of the pupils and the mind of the composer.

One of the most striking developments of modern psychology has been the recognition of *unconscious* processes of mind and the increasing understanding of the part which they play in affecting *conscious* processes and determining outward behaviour. Teachers have hardly begun to realize that the education of the æsthetic emotions and of taste is very largely an education of unconscious mental processes. The method of analysis, suitable for studies where conscious processes are emphasized, may therefore fail in lessons of appreciation. There is a need for silence and contemplation, for synthesis as well as analysis, in the study of art, music, poetry and Nature.

It is in nature study that the balance between analytic and appreciative methods is so seldom maintained. The pupils are kept so busy weighing and measuring, naming parts and counting petals, comparing and contrasting

¹ See O. A. Wheeler: "An Analysis of Literary Appreciation," *British Journal of Psychology*, Vol. XIII, Part 3, Jan. 1923, pp. 229-42.

specimens of plant and animal life, that few opportunities are given for the appreciation of the beauty of natural objects, or the enjoyment of the creative and continuous unfolding of a living individual. There are even fewer opportunities for the apprehension of the great movement of evolution, as life traverses from generation to generation. Yet

" if all of animated Nature
Be but organic harps diversely framed,
That tremble into song, as o'er them sweeps,
Plastic and vast, one intellectual breeze,
At once the soul of each, and God of all,"¹

the concentration on the separate and outward forms will not bring insight and understanding of the "intellectual breeze." The analytic study of the forms will need to be supplemented by some more synthetic apprehension of that which "sweeps o'er them," some immediate enjoyment, it may be, of "the Presence" which disturbed Wordsworth "with the joy of elevated thoughts." It is by the seizing of such opportunities that artists and mystics are educated. For "Art, whether it be painting or sculpture, poetry or music, has no other object than to brush aside the utilitarian symbols, the conventional and socially accepted generalities, in short, everything that veils reality from us, in order to bring us face to face with reality itself."²

Æsthetic education should therefore have its own distinctive methods. One of the most interesting experiments in evolving such methods was that of M. Jaques Dalcroze, who by his system of Eurhythmics encouraged children to interpret in bodily movements music heard by them and to create new expressions of harmony and rhythm in this medium.

¹ Coleridge : *The Eolian Harp*.

² H. Bergson : *Essay on Laughter*, 1913, p. 157.

"What can be more gratifying," he asks, "than to interpret freely, and in an individual manner, the feelings that actuate us . . . of allying eurhythmically our means of expression with those of others, to group, magnify and give style to the emotions inspired by music and poetry? And this gratification cannot but contribute to the raising of the instincts of the race and the permeation of the altruistic qualities necessary for the establishment of a healthy social order."¹

It may, however, be argued that there are very few artists and mystics and consequently that their experiences and needs should not affect methods of class teaching with adolescents.

"God has a few of us whom he whispers in the ear ;

The rest may reason and welcome : 'tis we musicians know."²

But the statistical facts show that the majority of adolescents, whatever may be true of adults, are potential artists or mystics. The trouble is that they are educated so that the utilitarian symbols occupy their whole minds. They are given constant practice in analytic thought, but little in appreciation of rhythm and harmony. Inspirational methods, based on the understanding of the effect of daily contacts with beauty, the value of silent contemplation and the use of a group in the spread of æsthetic emotions, are only beginning to be investigated. Until such problems of method are openly faced, however difficult of solution they may be, the right balance between the analysis and appreciation of life will not be maintained in the minds of the majority of adolescents, and the growth of an adequate philosophy of life will consequently be seriously hindered.

¹ *Rhythm, Music and Education*, 1921, pp. 219-20.

² Browning: *Abt Vogler*.

NOTES ON FURTHER READING

The New Teaching, edited by John Adams (Hodder & Stoughton, 1918), contains contributions by various specialists on the newer methods of teaching the chief subjects of the secondary school curriculum. Sir John Adams' contribution on English, Sir Percy Nunn's on Science and Mr. Keatinge's on History are especially valuable. In my book *Bergson and Education* (Manchester University Press, 1922) I have described the newer methods of teaching—creative (Chapter X), co-operative (Chapter XI), and inspirational (Chapter XII)—and have attempted to relate them to some governing philosophical principles.

The following books describing experiments in method will be found to be suggestive :

H. Parkhurst : *Education on the Dalton Plan* (Bell, 1922).

Dr. O'Brien Harris : *Towards Freedom—the Howard Plan* (University of London Press, 1923).

H. Caldwell Cook : *The Play Way* (Heinemann, 1917).

F. H. Hayward : *The Lesson in Appreciation* (Macmillan, 1922).

Mr. R. W. Pringle gives useful advice concerning the methods of teaching suitable for adolescents in his book, *Methods with Adolescents* (Heath, 1927), on the assumption that the curriculum is organized on a *subject* basis.

Mr. G. H. Holroyd's work on the organization of School Societies is well known, and his book, *Education for Leisure* (Arnold, 1942), has special reference to the senior school.

CHAPTER XIV

THE PROBLEM OF THE RELIGIOUS EDUCATION OF THE ADOLESCENT

EVEN before the second World War, modern Western civilization had reason to doubt the value of its own achievements. The development of the physical sciences in the nineteenth century certainly meant that man's knowledge of the laws of Nature rapidly increased ; and the widespread application of that knowledge to the solution of practical problems placed at his disposal machines of an almost infinite variety, new forms of transport, better methods of communication, myriads of new chemical products and vast and hitherto untapped reservoirs of energy. Similarly, the growth of the biological sciences increased his understanding of living organisms, including man himself, and added to his power of controlling their functions and behaviour. Man thus had at his command material wealth in plenty and gigantic power, which should have opened the way to creative leisure and to a higher standard of life for all. But, actually, there were many individuals in civilized communities who were living under conditions of poverty and degradation far worse than could be found among more primitive peoples, while at the same time there were others who were tempted to self-indulgence and whose creative gifts were buried under excessive wealth. There were some slaves of industry who when their daily labours were ended had insufficient leisure and energy left to live lives of their own, while there were others to whom work was vitally necessary for the preservation of their full humanity who were unable to obtain profitable employment. The truth is that, although there was

plenty for all, this nation did not appear to have discovered how to distribute the wealth and leisure that modern science had made available. Although there was power—gigantic power—at man's disposal, he had not succeeded in controlling it.

Then came the second World War and the misuse by civilized nations of their increased power, in the shape of guns, bombs, projectiles, high explosives and aeroplanes, for the purpose of destroying other human beings and the expressions and monuments of their civilization. No one can deny that under modern conditions and as an inevitable consequence of the increased power which civilized men wield, and of the more devastating engines of destruction which they now have at their command, when once the dogs of war are let slip the result is far worse than anything known to the barbarians. Indeed, the great achievements of man, his extended control of the material universe, his increased knowledge of, and power over, other living organisms, including his fellow-men, seem to have created new dangers to his life and new snares for his spirit. To save modern civilization, there needs to be a great advance in man's control of his knowledge and power. He needs a higher morality commensurate with the new orders of knowledge and power that he now possesses. Therefore, in all plans for post-war educational reconstruction, the problem of religious and moral education is crucial; and without its solution it seems improbable that we shall escape the present dilemma of civilization. The emphasis on religious education, which is a characteristic feature of the Butler Act, is an expression of a widespread realization that there must now be a growth of morality. Otherwise modern Western civilization may not be able to control the weapons which it has forged, but may proceed inadvertently to slay itself.

It is, however, also important that those who believe in democracy should advocate methods of moral and religious education which do not violate the freedom and integrity of the individual. If we are to win the peace as well as the war, we must be on our guard against adopting authoritarian methods in any sphere of education ; and the root principle of freedom for the individual to worship God in his own way and of respect for the moral law within must also be embodied in our educational programme and methods.

The history of British education is shot through with controversies concerning religious instruction. There have been those who have believed that explicit dogmatic instruction in the faith which they hold dear is a necessary part of the education of their children ; and, at the other extreme, there have been some who have favoured a secular solution, on the grounds that there should be equality of opportunity for the different religious faiths, and that a school supported by public money should not put any one faith into a privileged position. It will be noticed that the controversies have usually revolved around the *rights of adults* : the rights of members of a church to pass on the truths of which they believe themselves to be the guardians ; the rights of parents to have their children brought up in that faith, or that negation of faith, which they hold to be the truth ; or the rights of ratepayers. Little attention has been paid to the *rights of children and adolescents* to be allowed to choose and to develop harmoniously their own religions. Yet it is from this end that the solution of the problem of religious education in a democratic society is most likely to come. In tackling the controversial problem of the religious education of the adolescent, the psychologist has this one advantage, that he naturally begins from the right end, namely, from the consideration

of the needs and characteristics of adolescents, rather than from the complicated and often static beliefs and philosophies of religious bodies.

The more detailed answers to the questions relating to religious experiences in the investigation of adolescents already described may throw some light on this starting-point. Among the two hundred students whose general development during the period has already been considered, there was found great variety of religious training in home, church and school. Some were brought up strictly; some were allowed to go their own way; all ordinary denominations were represented, including Roman Catholics, Jews, Church of England, Church of Scotland, Church of Wales, Congregationalists, Baptists, Methodists, English Presbyterians and Swedenborgians, and also atheists. There appeared to be no correlation between the kind of training received and the reality of the religious experiences enjoyed, although the precise form which the experiences took was apparently influenced by the instruction received, the vocabulary used for their description being probably gained in this connection. The classified results are given below:

TABLE IV
RELIGIOUS EXPERIENCES (200 CASES)

		Per cent.
Q. 5.	Number who record religious experiences :	
	(a) in childhood	17 8.5
	(b) in adolescence	123 61.5
	Number who rebelled in adolescence	17 8.5
	Number who were puzzled in adolescence	14 7
	Number who still took things for granted	3 1.5
	Number who gave negative answers	29 14.5
	Number who left question unanswered	14 7
Q. 6.	Number who record "conversion"	57 28.5
Q. 7.	Number who had doubts either at the time of, or after, the new experience	94 47

Q. 11. Number who record curiosity concerning		Per cent.
the facts of life:		
(a) in childhood	48	24
(b) in adolescence	146	73
Number who left question unanswered .	21	10.5

There are almost as many varieties of religious experiences in this group as there are individuals. There were comparatively few who experienced a sudden conversion ; only 57 experienced anything that they were willing to term " a conversion "—a surprisingly low proportion as compared with the results obtained by Starbuck in America in his investigations of religious experiences¹—and of these very few could be called sudden, like that experienced by W. 5, who went to work in a cotton mill as a half-timer at the age of ten, where, he states, he " saw things done and heard things said that were poison to his mind " . . . and were " a distinct hindrance and curse to his spiritual life." At the age of seventeen he attended a mission service and heard a sermon on a text remembered and quoted by him. He says : " I stayed to the after-meeting for prayer. From that time my whole outlook upon life was changed. I realized an inward peace of mind and a deep sense of happiness. I took a delight and pleasure in all things spiritual. The low, trivial things of life became distasteful. I preferred religious services to socials and tea parties. I began to give Sunday School addresses and sermons. We formed a Young Men's Christian Association. We held prayer meetings, distributed tracts and religious newspapers, held open-air services, visited public-houses and lodging-houses, and gave short talks. I was red-hot for the salvation of the people, and honestly believed that the whole village could be won for Christ and His service."

The more usual experience was that of a gradual

¹ E. D. Starbuck : *The Psychology of Religion*.

awakening to spiritual values. The men and women who enjoyed this kind of development, together with the group who experienced conversion, number 123, but that number does not exhaust the cases of individuals who were influenced by the spiritual universe. The rebels must also be included. The woman (M. 9) who stated that she "was sickened by the Swanwick (Student Christian Union) Conference" was also making spiritual adjustments: and the same is true of the man (B. 7) who declared "various clerics were put on to me *re* confirmation, which I resisted. One gave me Paley's *Evidences* which I pulled to pieces to my own satisfaction at any rate . . . I despised the converted." Another, and in some ways an even more distracting kind of experience, is that in which the individual is puzzled and tries to be converted, but fails. If these two groups are added to the 123, the number who appear to be affected in one way or another amounts to 164 out of the total of 186 who answered the questions concerned. The generalization that an awakening to the spiritual universe is natural to the period of adolescence can therefore be safely drawn. True the awakening may be a disturbance, as in the case of the rebel; but the disturbance is evidence of some search for the truth, and such cases are to be contrasted with negative cases, where no such interest is indicated. In general, there is in the adolescent an interest in spiritual values, an attraction to Christian ideals, a use of prayer, and above all a determination to find the meaning of the Universe and his or her own place in the scheme of things.

The ill-effects of undue interference with this natural spiritual awakening are evident in a number of cases. Sometimes the attempts of adults to impose their beliefs on the growing adolescent mind seem to have the effect of encouraging an early enthusiasm, which does not last

and which is never woven into the texture of the individual's life. For example, a student (C. 5) reported that his religious training was very strict. He had attended church services twice on Sunday and also gone to Sunday School ever since he could remember : he had also been made to study the Bible regularly. At the age of 10 he had a strong desire to join the Church, and at 13 he made public confession of his faith and became a member. Gradually, however, he dropped the reading of the Bible and the practice of prayer ; and although at 14½ he was still a Sunday School teacher, his " religion was a mere sham." Afterwards " doubts and a sort of superior disdain or contempt gradually took hold " of him and still persisted when he answered the questionnaire at the age of 24.

In a more independent type, as in the cases of M. 9 and B. 7,¹ undue interference may evoke definite rebellion and a practical assertion of the right of the individual to his own religion. The truth is that a religion or a philosophy that really counts is always individual and organic. It is not imposed from without but grows from within. It must synthesize the individual's own experiences if it is to be really operative in ruling his life and conduct.

Even if there is no open rebellion, there is often a period of doubt and difficulty after the first enthusiasm has died away, when the individual is adjusting his new religious experiences to other aspects of his life. Some 47 per cent. of the student group record such doubts, some being obsessed by them for a period of years. It is significant that the most frequent doubts mentioned by this group concerned evolution and the relation of biological facts to religion, and the inconsistencies of professing Christians. Doubts concerning the truth of the

¹ See p. 184.

Old Testament, the existence of God, death and war experiences also occurred fairly frequently, but the conflict between biology and religion and the observed inadequacy of the Christian witness seemed to give the most trouble.

This conflict between biology and religion found a blatant expression in the case of M. 1,¹ who probably on its account was prevented from having any real religious experiences during adolescence. "I always had a kind of conflict," he said, "between 'God is love' and 'falling in love.'" The full significance of the frequency of this kind of difficulty is only understood when it is viewed in the light of the replies to the question relating to curiosity concerning the facts of life (Q. 11). The great majority (73 per cent. out of 89.5 per cent. who replied) were intensely curious concerning biological facts; but responsible adults usually failed them at the crucial point. They, however, sought satisfaction in many ways, some very undesirable, such as gossip with school-fellows and secret reading of books not always well chosen. One (M. 14) felt a great curiosity while he attended a grammar school, but, although he had been confirmed, he only obtained positive information "in barracks" during his war service. There is surely something amiss when both parents and educators of adolescents fail to minister to, or to take account of, this curiosity, and when spiritual leaders so tend to sectionize experience into the secular and the sacred, and to keep in separate compartments, their biology and their theology, that they fail to give effective help in the solving of the greatest conflict of adolescence.

The psychological facts which have been examined suggest three generalizations which have an important bearing on the problem of the religious education of the adolescent: (1) that in a society such as ours the search

¹ See pp. 62-3.

for a religion is characteristic of the adolescent ; the spiritual universe makes a direct appeal to him, and his response to this appeal should neither be hindered nor forestalled ; (2) that undue influence from adults should be avoided, for the individual's religion must be his own, it must synthesize his own experiences and be grown from within and not imposed from without ; (3) it must not ignore any section of his experiences if it is to be really operative in controlling his life and conduct.

These principles should determine the approach of the educator to the problem of the religious education of the adolescent. He needs to have less faith in his own partial interpretation of Reality and more faith in the power of the spiritual universe to make its appeal to the adolescent. He should realize that God will continue to reveal Himself in divers ways and in divers places ; and that it is possible that the imposition of his own ready-made views may interpose a barrier between Him and the growing mind of his pupil, whereas the call of the spiritual universe itself is insistent and compelling. It is the second half of this truth that Francis Thompson expresses so unmistakably in *The Hound of Heaven* :

“ I fled Him, down the nights and down the days ;
I fled Him, down the arches of the years ;
I fled Him, down the labyrinthine ways
Of my own mind ; and in the mist of tears
I hid from Him, and under running laughter.
Up vistaed hopes I sped ;
And shot, precipitated
Adown Titanic glooms of chasmèd fears,
From those strong Feet that followed, followed after.
But with unhurrying chase,
And unperturbèd pace,
Deliberate speed, majestic instancy
They beat—and a voice beat
More instant than the Feet
‘ All things betray thee, who betrayest Me.’ ”

Is the educator then to conclude that he need do nothing and that the compelling power of the spiritual universe justifies him in adopting a policy of *laissez-faire*? To assume this would be to misunderstand the fundamental laws of individual development and to misinterpret the whole meaning of freedom as applied to religious education. Bodily growth proceeds from within: but the absence of air and of suitable food, and the presence of dirt and darkness, may hinder growth. So it is with an individual's religion: he has to grow it himself if it is to fit his case and be effective in controlling his life. True religion is always educational in the sense that it leads out from an individual's deepest experiences. But the conditions for its growth must be provided by those responsible for the educational environment. It will not be enough merely to include biblical instruction in the curriculum. Nothing short of the religious orientation of the whole curriculum and of the life of the home and school provides the right environment. Of what use is it to teach a gospel of love in a period set apart for religious instruction if the whole teaching of history is shot through with the blasphemy of hate? The teaching of history must contribute something to the adolescent's philosophy of life: it must open his vision to the conditions and needs of man and lead him to understand something of the evolution of man's thoughts and ideals; and if it does this, it will not be contradictory to the gospel of love.

The traditional sectionizing of experience into the secular and the sacred is one of the great difficulties in the way of the development of a religion in the adolescent. Consequently, the theology that he is offered is unreal and other-worldly, and the biology that he is taught (if he is taught any) is materialistic. How parents and educators expect a normal adolescent to begin to develop

a satisfying philosophy of life if the facts of birth and of the creativeness of life are hidden from him is beyond comprehension. "The heavens declare the glory of God and the firmament showeth His handiwork." If the heavens and the firmament, surely the living creatures, most like Him in their powers of creation and revealing the great evolutionary process, also declare His glory. Yet the curiosity of the adolescent concerning the creativeness of life, which is born of his very kinship with life and its creativeness, instead of being used to further his philosophy is often denied satisfaction. In this way adults erect a barrier between the creative and spiritual forces that are at work in the universe and the mind of the adolescent. They hinder the growth of a philosophy of life by hiding in the darkness of a primitive taboo the facts of birth and creativeness, to which the facts of death and human destiny are undoubtedly related.

"It is the falling acorn buds the tree,
The falling rain that bears the greenery,
The fern plants moulder when the ferns arise.
For there is nothing lives but something dies,
And there is nothing dies but something lives,
Till skies be fugitives,
Till Time, the hidden root of change, updries,
Are Birth and Death unseparable on earth ;
For they are twain yet one, and Death is Birth." ¹

The prejudices of adults thus prevent adolescents from reflecting on some of the most crucial facts of which any philosophy must take account, and perhaps even drive them to obtain such distorted views of the great mystery of life that an irreconcilable conflict between sex and religion is set up in their minds.

What is needed is the removal of such barriers, and the substitution of a curriculum and a method of education

¹ Francis Thompson : "Ode to the Setting Sun."

which give opportunities for the growth of an adequate philosophy. The basic curriculum described earlier ¹ will serve this purpose : and any subject in it may contribute something to this end. Physical training may teach a respect for the body ; the practice of a craft may reveal the meaning of creation ; the study of Nature may evoke wonder and joy in the products of creation, and a real regard for truth ; history and geography may give a vision of the evolutionary process as it affects man, and may show the need for co-operation and fellowship ; literature, music and poetry may reveal the depths of man's spirit ; and, last but not least, the life of the school may illustrate a scale of values which will provide the adolescent with a healthy atmosphere in which his own philosophy will grow. Even the teaching methods contribute something. By their emphasis on creation, co-operation and appreciation, they throw light on the nature of man's mind and indirectly on the nature of Reality itself. Thus not only must all religion be educational but all education must also be religious.

What place, then, should explicit religious instruction have in the curriculum ? The practice of worship in very simple but beautiful form should be an essential part of the life of the school. Not that the pupils should be forced to take part in it, or that there should even be much talk about it, for this is one of the cases where the method of appreciation,² as contrasted with analysis, is appropriate. Indeed, merely to be a spectator of sincere acts of corporate worship may have a profound influence on the growth of an individual's religion. The practice of silence seems also to be a necessary part of the development of a philosophy of life, and should be encouraged, at least by the provision of a silence room in a school.

¹ See ch. xi, pp. 143-7.

² See ch. xiii, pp. 175-7.

The study of the Bible and particularly of the New Testament, as a record of the evolution of man's spiritual experiences and of his thoughts of God, should also find a place in the curriculum. Here, as in other subjects, the method adopted should be largely individual, the pupil reading and interpreting for himself, and the teacher being ready to answer questions and to give guidance concerning the sources of further information. In this way, undue influence will be avoided. But however valuable a knowledge of the contents of the Bible may be, it must not be forgotten that the passing of a Scripture examination or of a theological test may mean literally nothing in regard to the training of character unless the emotions, sentiments and actions of the individual are thereby influenced.

There is certainly an element of truth in the view that spirituality of character and outlook cannot be systematically taught, but can only be caught. It is to the individual characters of parents, teachers and members of churches that we must look, on the human plane, to provide the atmosphere in which the morality of the young will grow. No formal acts of worship, no tabulated scripture instruction and no theological teaching, however highly standardized in intellectual content, can ever atone for its absence. The life of the school, the personal relations of the staff to one another and to their pupils, and the methods adopted in discipline and teaching must exemplify the Christian view of life, if the spoken advocacy of that philosophy and ethic is not to be cancelled out.

Some spiritual leaders may argue that definite dogmatic and theological instruction should also be given. They have, however, failed to grasp two psychological facts: first, that dogmas imposed on an individual and not issuing from his own experience tend to be discarded with

contempt at a later stage ; and secondly, that it is the emotions and sentiments of an individual, and not his beliefs, that lie most at the root of his character, and that these are more likely to be educated by the practice of fellowship and worship than by the imposition of fixed theological views. They have also forgotten that the two greatest commandments of the Christian ethic refer not to beliefs or dogmas but to feelings or sentiments :

“ Thou shalt *love* the Lord thy God with all thy heart, and with all thy soul, and with all thy strength.”

“ Thou shalt *love* thy neighbour as thyself.”

What need is there to worry adolescents about the theological differences of Christians when the truths that they need are so simple and yet so profound that they “ cannot be uttered,” but can only be “ lived ” ? They were “ lived ” nearly two thousand years ago on the road between Bethlehem and Calvary : but they have since become so enshrouded in analytic complications that a special vocabulary is now necessary to follow the twists and turns of the attempts at their utterance. It is not these twists and turns of theological explanations but the splendour of the direct vision that is needed to win the allegiance of the adolescent ; and concerning this there is a measure of agreement in the Christian churches. If Christians concentrated on the “ actable ” truths, explaining them by their own lives, they would be rendering the best possible service to youth and to their religion : for the adolescent will respond to a living example embodying the Christian ethic, but he will reject the influence of shams, even if they have the most orthodox theological views and speak with the tongues of angels.

The Butler Act lays down that all State-aided schools should begin each day with a corporate act of worship, and that there should be provision for religious instruction in every school, though parents may still withdraw their

children from such worship and instruction if they so desire. It thus gives a more definite place to religious education in the secondary, as in the primary, schools. This is in accordance with the needs of adolescents, and in the hands of the right kind of teachers should aid the fourth great life-adjustment, namely, the finding of a working philosophy of life.

In the past, although there have been "direct grant" schools giving denominational religious instruction, the secondary school system, unlike the primary, has been relatively free from sectarian divisions. Under the new Act, there are to be county secondary schools where, in general, religious instruction is to be on "an agreed syllabus" and will not include any catechism or formulary which is distinctive of any particular religious denomination. There are also to be "controlled" secondary schools, where religious instruction is to be in accordance with the provisions of the trust deeds; and "aided" and "special agreement" schools, in which the religious instruction given to the pupils is to be under the control of the governors. In practice, this will mean that these latter schools will give religious instruction in accordance with the tenets of a particular denomination. When the educational system is completely reorganized, so that the primary stage ends and the secondary stage begins at 11+, many more denominational secondary schools than exist at present will probably be instituted or developed from existing elementary schools. Thus, under the Butler Act, a dual system is virtually imposed at the secondary, as well as at the primary, stage of education.

This reinforcement of sectarianism in education is a serious departure from the basic principle of child-centred education. The freedom of the individual to worship God in his own way has virtually been undermined; and the authority of parents has been emphasized in a way

that is inconsistent with the adolescent's growing need for independence. For the truth is, that the details which divide the Christian churches are largely irrelevant to children and adolescents, whereas the ethics and principles which unite them are just what the young need for their spiritual development. In the provisions of the Act concerning religious instruction, the child has been squeezed out of the picture by sectarian interests, and his harmonious many-sided development has not been the main consideration determining the various compromises effected.

It is not only the ideal of child-centred education that has been sacrificed in the provisions for religious instruction, but also the ideal of a co-operative and well-integrated society. In the Government White Paper on Educational Reconstruction it was expressly stated that while there should be diversity of educational provision to suit the various abilities and aptitudes of individuals, "such diversity must not impair the social unity within the educational system which will open the way to a more closely-knit society and give us strength to face the tasks ahead."¹ It may, of course, be argued that the need for a religious awakening is at present so urgent that even if the next generation is split into sections as a result of the religious training in the schools, it is a price worth paying for a real advance in morality.

The crucial question is, therefore : Is this emphasis on sectarian differences and on dogmatic teaching likely to bring the desired result ? Will religious education, however well meaning, be successful in securing its objective if it ignores the needs and interests of children and adolescents—in other words, if it starts not from where they are but from where their parents are, or even worse, from where certain vested interests assume their parents

¹ Para. 1.

are? The evidence collected by Professor Cyril Burt concerning the order of preference of school subjects should make us pause before a further extension of sectarian teaching in the schools. Out of the fifteen subjects of the elementary school curriculum, boys placed Scripture last (fifteenth) in order of preference; girls also placed it low (twelfth), though not so low as Arithmetic, Spelling and Grammar.¹ Similarly, an investigation of preferences for school subjects among five thousand pupils at the secondary stage showed that in the case of boys Scripture was the most unpopular subject; and in the case of girls it shared with Physics the same opprobrious position.

From the time of Aristotle to Sir Richard Livingstone it has been repeatedly pointed out that certain studies must wait on experience of life, and are on that account only appropriate to maturity. Philosophy and theology belong to this category, and to endeavour to teach them at too early an age is to forestall experience and to make them distasteful to the individual. On this account, dogmatic and denominational instruction is not likely to be an effective method of moral and religious education during childhood and early adolescence.

The division of the educational system of this country and the consequent disruption of a democratic society would be a high price to pay even for an advance in personal morality. But, when in the minds of experienced educationists there are the gravest doubts as to whether an advance in morality can come that way, there is surely a case for the teachers and the churches to come together to give further consideration to the problem of religious education. If the various denominations could learn to co-operate on essentials, or, alternatively, if they would consent to relegate their differences

¹ *Report on the Primary School*, H.M.S.O. 1931, Appendix III, p. 278.

to their own Sunday schools, they might still seize the present great opportunity for the welding together of a unified system of education on a Christian basis. But if, by forcing their sectarian views on the schools, they deny the principle of child-centred education and disrupt the community with sectarian strife, they will certainly continue to decline in influence. They will then fail to play their true part in meeting the outstanding need of the present for a philosophy sufficiently universal, dynamic and positive to mould the thought and pattern of modern civilization.

NOTES ON FURTHER READING

Dr. R. H. Thouless' *Introduction to the Psychology of Religion* (Cambridge University Press, 1923) is a clear analysis of the different elements which contribute to religious experiences. Although the treatment is elementary, there is no false simplification as there was in E. D. Starbuck's earlier work *The Psychology of Religion* (W. Scott, 1921), which, however, is interesting as a study of adolescent conversions.

Mr. A. F. Shand's masterly treatment of the nature and growth of sentiments in *The Foundations of Character* (Macmillan, 1914) is of outstanding importance as a background for the understanding of the development of religious experience. Miss Margaret Phillips' book, *The Education of the Emotions* (Allen & Unwin, 1937), contains interesting examples of the development of various sentiments in individuals and contains a chapter (XI) on religion.

On the educational problem, Professor Campagnac's volumes *Converging Paths* and *Religion and Religious Teaching* (Cambridge University Press, 1916 and 1918) are suggestive and are also charmingly written; and Dr. L. P. Jacks' statements of the case for indirect, as opposed to direct, religious instruction in "Education and Religion," the first essay in *A Living Universe* (Hodder & Stoughton, 1923) and in the Report of the Conference on New Ideals in Education held at Oxford in 1916, show a deep insight into the psychology of religion. Since its first publication in 1933, the quarterly review entitled *Religion in Education* (Student Christian Movement Press) has contained many valuable articles on problems of religious education.

CHAPTER XV

THE RECRUITMENT AND TRAINING OF TEACHERS OF ADOLESCENTS AND YOUTH LEADERS

THE extension and reform of adolescent education envisaged in the Butler Act will not only necessitate the creation of new types of educational institutions, such as multilateral, technical and modern secondary schools, county colleges and youth centres, but will also require the recruitment and training of a vast army of new kinds of teachers. The number of additional teachers needed for implementing all the provisions of the Butler Act and for reducing classes in all schools "to a teachable size" has been estimated by the Nuffield College investigators¹ as 127,400. This figure includes the necessary additions in respect of nursery, infant and primary schools, and is probably more generous in regard to staffing ratios than any present-day Ministry of Education is likely to sanction. But the additional teachers needed for the raising of the school-leaving age to 15 and then to 16, and for the staffing of county colleges, can hardly be fewer than 50,000 on the most conservative estimate.

In addition, it must be remembered that the teaching profession has lost, through call-up to the Forces, some 20,000 of its younger members, some of whom will not return; and that during the war years, for the same reason, the output of men completing courses in university training departments has become almost negligible. There is therefore much leeway to be made up, especially

¹ *The Teaching Profession To-day and To-morrow*, 1944.

in regard to the staffing of the adolescent stage of education.

In recent years the institutions concerned with the training of teachers in England and Wales have been of two main types. Firstly, there are State-aided two-year training colleges, mainly residential in character and entirely devoted to the training of teachers. These contribute an annual output of about 5,000 certificated teachers, chiefly for work in infant, junior and senior schools ; that is, for the *primary* stage of education as it has been in the past, but including a part of the *secondary* stage of the future. They vary greatly among themselves in fees, amenities, standards of entry and methods of discipline of students. There are some small single-sex and single-sect colleges, with a somewhat philanthropic atmosphere due to a lingering tradition of education as a form of charity to the poor. There are also more modern and usually larger colleges maintained by Local Education Authorities. All are socially segregated, the policy of isolation of intending teachers being the keystone of this system of training. Secondly, there are university training departments, where intending teachers pursue, with the aid of government grants, either a four-years' course, consisting of a degree (often an honours degree) course, followed by professional training, or a one-year post-graduate course of professional training. The proportion of students in residence is smaller than in the training colleges, but there is no segregation of intending teachers from other university students preparing for entrance to other professions. In pre-war days, the university training departments contributed an annual output of about 1,500 teachers, who found work mainly in secondary, central and senior schools. The total annual output of trained teachers from training colleges and university training departments was based

on the assumption that uncertificated teachers would continue to be employed, and even then was hardly sufficient to make good the gaps due to retirements.

So serious is the present problem of staffing the national educational system that the Ministry has put forward a scheme for the emergency recruitment and training of teachers¹ in connection with the Government's demobilization plans. The recruits are to be drawn from His Majesty's Forces and other forms of national service, and are to be given a year of training in emergency institutions set up for the purpose. While it will be generally agreed that national service may give an experience of life and a breadth of outlook of the greatest value to the intending teacher, the period of training under the scheme appears to be altogether too short for the necessary study and adjustment to the work of education, even if the recruits are selected on adequate criteria of literacy, practical ability, general intelligence and suitable personality traits, and if the emergency training institutions are staffed by tutors who not only know how to teach but how to train—a very different proposition. On this account, the recommendation for a two-year, part-time course of study after the one year of full-time training should be vigorously carried into effect, in the interest of the recruits, the teaching profession and the whole educational system.

The McNair Committee, appointed to report on the general problem of the supply, recruitment and training of teachers and youth leaders, started with a clear recognition that three things in particular must be done if the number and quality of teachers required to match the projected educational reforms are to be obtained. The field of recruitment must be widened ; conditions of service which deter people from becoming teachers must

¹ Circular 1652, H.M.S.O., 1944.

be abolished ; and the standing of education must be improved so that a sufficient number of men and women of quality will be attracted to teaching as a profession.¹

In the future, teachers of adolescents and youth leaders will obviously have to be recruited not only from secondary (grammar) schools but also from technical and modern schools, and, as they come into existence, from multilateral secondary schools. There should also be suitable recruits from the adult educational movement, from industry, commerce, agriculture and the professions. The men and women in His Majesty's Forces and in other forms of national service whose university courses were interrupted or postponed will need to be encouraged to return or to proceed to universities and technical colleges for degree and similar courses of advanced study. From these, some valuable recruits for teaching in the different kinds of secondary schools, now being differentiated, and in county colleges will no doubt be obtained. The spirit in which the task of the training of these and similar entrants to the profession is undertaken will certainly be one of the most important factors in determining the success or failure of the new venture in adolescent education. There is thus an urgent need at present for training institutions to adjust their methods to new ideals of education and to a greater variety of recruits preparing for service in many different types of educational institutions.

To this end, technical colleges, agricultural institutes, art schools and music colleges, as well as university departments in the faculties of Arts, Science, Medicine, Applied Science, Commerce, Law, Theology and Social Studies, have their parts to play. It is doubtful, however, whether these available contributions can be utilized in such a way as to serve the true purposes of education

¹ *Teachers and Youth Leaders*, H.M.S.O., 1944, para. 59.

without a major constitutional change in regard to the training of teachers.

The McNair Committee was divided on this issue, half of its members being of the opinion that the differentiation and integration of training necessary for implementing the Butler Act could only be effected by the acceptance of responsibility by the universities for the training of all kinds of teachers. They therefore recommended the establishment at each university, or university college, of a School of Education, which would absorb the existing university training department and become an organic federation of approved training institutions in the area, responsible for the training and assessment of all students (graduate and non-graduate) engaged in qualifying for any branch of educational work. The other half of the McNair Committee recommended the continuance, with certain changes, of the Joint Board scheme, which has been in operation for the last fifteen years. These Joint Boards, on each of which a university and the training colleges in its area are represented, have been responsible for the qualifying examination in academic and professional (theoretical) studies of training college students, the Ministry itself, through its inspectors, retaining the responsibility for the final assessment of ability in practical teaching. The relation of the universities to the training colleges, through these Joint Boards, has usually been slight and superficial. Indeed, the truth is that there has been little inspiration to either side through this association and, as a result, there has been little progress towards an integrated training service.

The main advantages of the University School of Education scheme can be most easily understood by considering its probable effects on the students and staffs of training institutions, on the teaching profession

and on the national system of education, envisaged in the Butler Act.

If the scheme were adopted, intending primary school teachers entering training colleges would no longer be isolated from other students (men and women) engaged in preparation for work in other spheres of life. They would rub shoulders with intending ministers, clergymen, doctors, lawyers, journalists, welfare workers, scientists, engineers and with others seeking careers in industry, agriculture, commerce and administration. Such contacts would give the intending teacher a practical insight into the complexities of a modern industrialized society and into the social heritage which it is his or her business to interpret to the next generation. Since adolescents, whether in grammar, technical or modern secondary schools or in county colleges, stand on the threshold of the workaday world, knowledge of this kind is indispensable to their educators ; and there can therefore be no justification for the segregation of such teachers during their training. Nor should primary school teachers be separated from secondary school teachers during their training, as though they belonged to a different, and inferior, profession. If the training institutions in an area formed an organic federation, as is implied in the School of Education scheme, interchange of students would be possible where this was desirable ; and all students would have a broader social life and would be in contact with the great movements of thought and endeavour focused in a university or university college.

The members of staff of the training colleges, who are usually experts in primary (including senior) school work, would be brought into closer relationship with the members of staff of a university training department who have in the past been mainly concerned with the training

of secondary school teachers. This would be to their mutual advantage, for the training colleges have evolved a method of training in which the education and the professional training of students are closely interrelated. This is especially suitable for certain kinds of intending teachers, and it would be a loss to education if this form of training disappeared. On the other hand, the university training departments have developed a form of professional training, superimposed on a degree course, which for certain kinds of students not only ensures a high standard of scholarship in their respective academic studies but also a broad and philosophical approach to the consideration of educational problems. Both kinds of training are needed, and the staffs concerned with the one could learn much from their colleagues concerned with the other. In addition, if there were this organic association, there could be a wider use of specialists, appointed to one institution, for the benefit of all. The staffs of the training colleges would also gain something of great value, already possessed by the staff of a university training department, namely, direct contact with other departments of the university in the faculties of Arts, Science and Medicine, and especially with those departments most closely related to education, such as philosophy, psychology, the social sciences, physiology and preventive medicine. Research in education would be encouraged by this contact, and a University School of Education could thus become a spearhead of educational reform.

Many teachers wish to continue their studies after they have entered the profession, and a University School of Education could be a centre for conferences and refresher courses for acting teachers. It would be better able to meet the needs of the great number and variety of teachers in its area if it had the close co-operation of the staffs of

all the federated institutions. It could thus be a centre for the improvement of educational methods ; and contact with a university would tend to unify and to raise the status of the whole teaching profession.

In order that the provisions of the Butler Act in respect of adolescent education may be implemented, the extension of the period of teacher-training in training colleges from two to three years, which was one of the chief recommendations of the McNair Committee, would seem to be essential and would make contact with a university all the more desirable. In order to provide the appropriate variety of teachers there will certainly need to be courses of training, differentiated from those existing at present, for intending teachers in technical, modern and multilateral secondary schools and county colleges, for youth leaders and for specialists in health education, art, music, handicrafts, the applied sciences, horticulture, agriculture, technology and commerce, as well as in the usual academic studies. To this end, other institutions, such as technical colleges, art schools, colleges of music, agricultural institutes and medical schools, will have their parts to play ; and it is by association with the regional University School of Education that their distinctive contributions could most easily be made available for the training of teachers and in the interests of education. In this way an integrated plan for training the number and variety of teachers needed could be developed in each region and in turn in the whole country. No Joint Board, lacking in authority and meeting occasionally, would be equal to the task of evolving such a plan and thus of ensuring the quality and variety of training necessary for the implementing of the Butler Act.

Although there will no doubt be opposition to this fundamental reform of teacher-training both from timid educationists and from vested interests, the main diffi-

culty will probably arise in the universities, who may judge that this gigantic venture will involve too much work and energy at a time in their history when they are faced with many other responsibilities in regard to national reconstruction. But if they could realize that the training of teachers is the focus of educational progress, they would not refuse, whatever might be the cost, to seize the present opportunity to play a leading part in directing and inspiring the development of the national system of education contemplated under the new Education Act.

It will be generally agreed that there should be a great variety of courses for intending teachers and youth leaders, in a great variety of institutions, in order that the future educators of adolescents may extend their own understanding of some significant development of human culture, or increase their own skill in some art, craft or technological process important in modern life. The question naturally arises : Should there be a basic training, whether pursued simultaneously with, or subsequently to, these varied courses, common to all intending teachers and leaders of youth ?

In recent years not only have the responsibilities of teachers been greatly extended but the whole conception of education has changed and broadened. The emphasis, especially in the newer types of schools and youth clubs, is no longer placed on *instruction* and *learning*, but rather on *development* and *living*. The curriculum is becoming increasingly child-centred and the educational institution is gradually becoming a true society. The course of preparation for teaching will need therefore to be correspondingly modified.

In close relationship with actual practice in appropriate schools, colleges and youth clubs, there will be need for a systematic study of human development,

particularly of the period of adolescence ; and for careful consideration of the variations in physique, interests and attainments, general intelligence and special abilities, temperament and character, likely to be encountered. There should be training in the direct observation of individuals in respect of these characteristics, and also of their environmental conditions, which are so often influential in determining their success or failure in the major adjustments of life. In short, it is necessary that all intending teachers of adolescents, whether they are classical scholars, skilled craftsmen or physical training specialists, should acquire a working knowledge of physiology and psychology relevant to the main problems of adolescent education. It is also desirable that they should learn to view their own specialisms against a background of the whole heritage of the society to which they belong. During their training they should therefore have opportunities to study the nature of that society (including its educational system), the achievements of human civilization and the possibilities of education as a means of further social evolution.

Both in his or her preliminary training before entering the profession and by his or her continued self-education afterwards, the educator of adolescents has thus to endeavour to be physiologist, psychologist, sociologist and philosopher, as well as an artist skilled in guiding and influencing the many-sided growth of human beings. As physiologist and psychologist, he or she must be trained to observe and interpret the behaviour of individuals and to understand the processes of individual development. As sociologist, he or she must appreciate the structure of modern society and be able to deduce the kind of education possible and desirable to effect reforms in that society. As philosopher, he or she must take hold of the achievement of the past and select from

it what is most central and significant ; and must be possessed of a scale of values, arrived at by persistent and unprejudiced thinking, or by the high union of thought and emotion, usually called religion. The educator need not be a profound analytic thinker, but rather must have a direct insight into the meaning of life and a personal faith in regard to its ultimate purpose. The analytic thinker, whether he be scientist, philosopher or theologian, might fail to influence adolescents, for the twists and turns of his thought and the intricacies of his conceptions seem to necessitate the use of a special vocabulary for their expression and consequently for their apprehension. But the teacher-artist, who is also a harmoniously developed human being, with full control of passing emotions and anti-social impulses, continually showing friendly understanding of individual adolescents, capable of broad social sympathies and exemplifying in his or her own person high ethical standards, will succeed in communicating his or her vision of life, for it is direct and simple and is therefore peculiarly appropriate to the needs of adolescents.

NOTES ON FURTHER READING

Dr. R. W. Rich's book on *The Training of Teachers* (Cambridge University Press, 1933) gives an interesting and well-balanced account of the development of teacher-training in England and Wales during the nineteenth century.

There have been many recent reports on problems of teacher-training published by various committees of investigation, the most important of which are the following: *The Training of Teachers for Public Elementary Schools* (H.M.S.O., 1925) ; *Music, Arts and Crafts and Drama in Training Colleges* (H.M.S.O., 1928) ; *The Training of Rural Teachers* (H.M.S.O., 1929) ; *The Training of Teachers* (N.U.T., 1939) ; and the McNair Report, entitled *Teachers and Youth Leaders* (H.M.S.O., 1944).

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